CASE 6750: CO<sub>2</sub>-IN-ACTION, INC. FOR CREATION OF A NEW CARBON DIOXIDE GAS POOL AND SPECIAL POOL RULES, HARDING COUNTY, NEW MEXICO

...

۰.۲

Case NO. 50

Application Transcripts. Small Exhibits

ETC.

## 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. 6750 Order No. R-6230

APPLICATION OF CO<sub>2</sub>-IN-ACTION, INC. FOR CREATION OF A NEW CARBON DIOXIDE GAS POOL AND SPECIAL POOL RULES, HARDING COUNTY, NEW MEXICO.

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 28. 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>9th</u> day of January, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

Parts have

(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,  $CO_2$ -In Action, Inc. seeks the creation of the North Bueyeros-Santa Rosa  $CO_2$  Gas Pool comprising all or parts of Sections 1, 2, 3, 10, 11, and 12, Township 20 North, Range 30 East and Sections 20 through 23 and 26 through 35, Township 21 North, Range 30 East, and the promulgation of special rules therefor including a provision for 160-acre spacing units with the option to drill on 40 acres, and with well locations as close as 330 feet to the unit boundary.

(3) That the evidence presented in this case was insufficient to demonstrate that the proposed North Bueyeros-Santa Rosa CO<sub>2</sub> Gas Pool is a separate and distinct gas pool.

(4) That there are carbon dioxide gas wells and indications of carbon dioxide gas reservoir(s) outside the proposed pool which may be part of the same common source of supply. -2-Case No. 6750 Order No. R-6230

(5) That the proposed North Bueyeros-Santa Rosa  $CO_2$  Gas Pool should not be created pending further study and the application for such creation should, therefore, be denied.

(6) That there is little available reservoir data on wells within and near the proposed pool upon which to base pool creation or to establish pool rules.

(7) That to provide for the collection of reservoir data including pressures, porosity, reservoir interference, well logs, samples, and other data the applicant should be permitted to drill one infill well within the SW/4 of Section 27, Township 21 North, Range 30 East, Harding County, New Mexico.

(8) That the applicant, prior to the drilling of said infill well, should confer with the supervisor of the Division's district office at Santa Fe to prepare a drilling, testing, and production program which will yield appropriate reservoir and reservoir drainage data.

(9) That approval of the application for infill drilling with the provisions set out above, should serve to develop needed reservoir data and should not cause waste nor violate correlative rights.

#### IT IS THEREFORE ORDERED:

Martin L.

(1) That the application of  $CO_2$ -In-Action, Inc. for the creation of the North Bueyeros-Santa Rosa  $CO_2$  Gas Pool in Harding County, New Mexico, is hereby denied.

(2) That the applicant is hereby authorized to drill an infill well within the SW/4 of Section 27, Township 21 North, Range 30 East, Harding County, New Mexico, for purposes of both production and development of reservoir data.

(3) That the applicant, prior to the drilling of said infill well, shall confer with the supervisor of the Division's district office at Santa Fe to prepare a drilling, testing, and production program which will yield appropriate reservoir and reservoir drainage data.

(4) That the applicant shall supply the Division with one copy of all well logs or other reservoir data developed through the drilling and testing of said infill well. -3-Case No. 6750 Order No. R-6230

1

(5) 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.



fd/

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

7 JOE D. RAMEY Director



# STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE SECRETARY

POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING BANTA FE, NEW MEXICO 87501 15051 827-2434

## January 10, 1980

Mr. Thomas Kellahin Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico

Re:	CASE NO.	6750	
	ORDER NO.	R-6230	

Applicant:

CO<sub>2</sub>-In-Action, Inc.

# Dear Sir:

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

Pours very truly, U JOE D. RAMEY Director

JDR/fd

Copy of order also sent to:

Hobbs OCD	x
Artesia OCD	x
Aztec OCD	

Other Sally Trigg

بېتىم بەردىرى باردان باردىرى مەربى بىرى كەركى كەركى



# CO2-IN-ACTION - BUEYEROS PLANT RESERVE CALCULATIONS

1410 2

1.14

I. Volumet	cric Reserve	es: Based e		Saturation 2	5%
LEASE NAME:	STATE	GONZALES	GONZALES	MINERALS	GALLAGER
Well No.	#1	#A-1	#2	#1	#1
Ft. of Pay	52'	35'	21'	281	351
<u>Reserves</u> : E	Based on 10	PSIG SIP AL	pandonment		•••
MCF/40 Ac. MCF/160 Ac.		51,227 204,906	30,736 122,944	40,981 163,925	51,227 204,906
· · · ·	-	•			
	rable Reser ne Curve)	ves: Based	on 10 PSIG	SIP Abandon	ment
LEASE NAME:	STATE	GONZALES	GONZALES	MINERALS	GALLAGER
Well No.	#1	#A-1	#2	#1	#1
SIP 10-12-78	36	37	39	39	39
SIP 10-10-79	22	31	32	34	31
PSI Drop	- 14	6	• 7	5	8

PSI Drop	• 14	6	• 7	5	8
Production (MCF)	31,138	41,585	50,073	42,118	24,719
MCF/PSI	2,224	6,931	7,153	8,424	3,090
Recoverable Reserves	57,828	187,133	207,445	244,284	89,606

	2011,110	23-1-1 2003-9	00,000
5. 5	OIL CO	E EXAMINER STA	METS
	CO2	EXHIBIT NO. <u>4</u>	
	Sub.citt:		79
			NEW DUCK OF DUCK DAY AND

LEASE NAME Well#	STATE	GONZALES	GONZALES	MINERALS	GALLAGER
Sec-Twp-Range	#1	#A-1	#2	<i>ii</i> 1	#1
County	27-21N-30E	32-21N-30E	9-21N-30E	16-21N-30E	9-21N-30E
State	Harding	llarding	Harding	Harding	Harding
T.D.	New Mexico	New Mexico	New Mexico	New Mexico	New Mexico
Casing	972 Noll of comb	894	928	847	815
Ŷ	10" @ 9201	8 5/8" @ 859	7" @ 907'	8 5/8" @ 819'	8" @ 780'
Completed . Petertial ( 17, 70	10-12-37	1-23-44	7-31- <b>()</b> 1	11-14-50	9-3-37
Potential 4-17-78				· · ·	
S1P	36.3	37.4	38.4	38.7	38.8
AOF Mcfd	360	805	1,700	1,090	850
	1.			-,	0,0
		$\checkmark$			
Production Mcf					
Oct. 1978	822	954	824	659	460
Nov. "	1,336	1,681	1,086	1,622	830
Dec. "	3,964	4,687	2,378	3,421	3,096
Total 1978	6,122	7,322	4,288	5,702	and the second designed as the second designe
_			,	5,702	4,386
Jan. 1979	3,239	4,128	1,655	3,574	2 260
Feb. "	3,026	3,222	2,217	3,158	2,269
Mar. "	2,671	3,764	3,273	3,324	1,728
Apr. "	2,802	5,323	6,116		1,760
May "	3,979	4,134	6,773	5,193	2,873
June "	1,639	1,612	2,771	4,482	2,115
July "	2,547	3,225	5,198	1,667	757
Aug. "	2,970	4,781	7,328	3,182	1,543
Sept. "	2,143	4,074	10,454	4,720	2,334
Oct. "	,	.,	10,494	7,116	4,954
Nov. "					
Dec. H					
Total 1979 to Date	25,016	34,263	45,785	0.000	
· .	,	J+,20J	43,783	36,416	20,333
Total Cinci Olivia	-				
Total Since Oct. 19					
	31,138	41,585	50,073	42,118	24,719
Total all wells 18	9,633				,
rocur ari werrs 10	7,033				
	·			r	
SIP 10-12-78	36	37	39	39	20
SIP 9-27-79	28	32	31	34	39
SIP 10-10-79	2.2	31	32	34	34
					31

ETTEL C EXAMINER STATETS	5
GIL COMPLERVATION DIVISION	1
CO2 EXHIBIT NO. 5	
CASE NO. 6750	
Submitted by	
Hearing Date 28 Nou 79	

•



ļ



			Page1				
	1	EHERGY AND A	OF NEW MEXICO MINERALS DEPARTMENT RVATION DIVISION				
	3	STATE LAN	ND OFFICE BLDG.				
			I, NEW MEXICO Vember 1979				
	4	EXAMIN	NER HEARING				
	6		)				
	7	IN THE MATTER OF:	) )				
	8	Application of CO for creation of a					
201	9	xide gas pool and Harding County, Ne	special pool rules,) ew Mexico. )				
r exico 87501	10		)				
ew Mex	11	BEFORE: Richard L. Stamets					
ta Fe, N	12						
San Ke	13	TRANSCRIPT OF HEARING					
	14						
3	15	APPI	EARANCES				
	16						
-	17	For the Oil Conservation Division:	Ernest L. Padilla, Esq. Legal Counsel for the Division				
	18		State Land Office Bldg. Santa Fe, New Mexico 87501				
	19						
	20	For the Applicant:	W. Thomas Kellahin, Esq.				
	21		KELLAHIN & KELLAHIN 500 Don Gaspar				
	22		Santa Fe, New Mexico 87501				
	23	For Richard Russell:	Sally Trigg, Esq.				
	24		Mosquero, New Mexico				
	25						

ł,

والمحافظ والمحافظ

ĺ

Page\_\_\_\_

INDEX

CHESTER LAMBERT

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Stamets	18
Cross Examination by Mr. Ulvog	22
Cross Examination by Ms. Trigg	23
Recross Examination by Mr. Stamets	27



## EXHIBITS

Applicant	Exhibit	One,	Structure Map	6
Applicant	Exhibit	Two,	Мар	11
Applicant	Exhibit	Three	e, Document	13
Applicant	Exhibit	Four	, Document	14
Applicant	Exhibit	Five	, Tabulation	17

			Page3
$\sim$		1	MR. STAMETS: We'll call next Case 6750.
		2	MR. PADILLA: Application of CO <sub>2</sub> -In-Action,
		3	Inc. for creation of a new carbon dioxide gas pool and
		4	special pool rules, Harding County, New Mexico.
		5	MR. STAMETS: Call for appearances in this
		6	case.
		7	MR. KELLAHIN: I'm Tom Kellahin of Santa
		8	Fe, New Mexico, appearing on behalf of the applicant, and I
	<b>8</b> 87501	9	have one witness.
	<b>BETVİCO</b> Vice Mexico 8	10	MR. STAMETS: Any other appearances in this
		11	case?
-	reporting 1 Reporting S 1 Santa Fe. No	12	MS. TRIGG: Yes. Sally Trigg from Mosquero
5*	Court R Court R	13	New Mexico, appearing on behalf of Richard Russell. I don't
	General	-14	know I don't have any witnesses but I may want to cross
		15	examine.
		16	MR. STAMETS: Okay. Any other appearances?
		17	I'd like to have the witness stand and be sworn, please.
		18	
		19	(Witness sworn.)
		20	·
		21	CHESTER LAMBERT
		22	being called as a witness and having been duly sworn upon his
		23	oath, testified as follows, to-wit:
		24	
		25	

2 7

1

.

A State of the second

• • \* 5

11 .-

DIRECT EXAMINATION 2 BY MR. KELLAHIN: 3 Would you please state your name, by whom Q. you're employed, and in what capacity? 5 I am Chester Lambert. I've Vice President A. 6 of CO<sub>1</sub>-In-Action, a subsidiary of Baker and Taylor Drilling 7 Company, of which I am Vice President, and head of the geology 8 department of our oil and gas producing. 9 Where is your home office? Q. 10 Amarillo. A. 11 Is that where you're based? 0. 12 Yes. A. 13 Mr. Lambert, have you testified before the Q. 14 Oil Conservation Division? 15 A. No, I have not. 16 Would you briefly summarize for benefit of Q. 17 the Examiner what the nature of this application is and what 18 experience you've had with the CO<sub>1</sub> production? 19 The nature of this request is to do some A. 20 infill drilling for testing purposes and to accumulate some 21 data that we can rely on in this old field. 22 Where is this field located? Q. 23 A, It's in Harding County, New Mexico, near 24 Bueyeros. 25 Q. How long has CO2-In-Action owned or operated

reporting service General Court Reporting Service 8750

		Page5
1	this CO <sub>2</sub> plant an	d facility?
2	А,	We've operated it since since October
3	of '78, and we pu	rchased it, I believe, just a month or so be
4	fore.	
5	Q.	How long have you been employed by Cú <sub>7</sub> -In-
6	Action?	
7	А.	Since its since it's been formed, which
8	was in the com	pany is now two years old.
9	Q	And before that where were you employed?
10	A.	Before that I was with Baker and Taylor
11	for thirteen year	
12	0.	In what capacity, Mr. Lambert?
13	а. 2.	
14		As geological engineer and into Vice Presi-
15	dent over contrac	ts and geological.
16		MR. KELLAHIN: I tender Mr. Lambert as an
17	expert witness.	
18		MR. STAMETS: Okay. Mr. Lambert, I presume
19	you're testifying	today as an expert geologist?
20	А.	As a geologist, yes, sir.
20		MR. KELLAHIN: Mr. Lambert does not hold
	a professional de	gree.
22	Α.	I have twenty-three years experience in
23	some phase of pet	roleum geology.
24		MR. STAMETS: Okay, so you'll be testifying
25	as a practical ge	ologist
R		

ч: ,

General Court Reporting Service General Court Reporting Service Santa Fe. New Mexico 87501

1

•

-

.

١

المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع والمراجع المراجع والمراجع والمراجع المراجع المراجع المراج

Yes, sir.

A.

MR. STAMETS: -- and your experiences have been varied experience in oil and gas operations?

A. Yes, sir, from well-sitting to evaluating prospects.

MR. STAMETS: I believe this witness is considered qualified as a practical oil man and he should be able to cover the matters before us today.

Q. Mr. Lambert, let me direct your attention to what has been marked as the Applicant Exhibit Number One, and would you tell me what this exhibit is?

A. This is a structure map of the area that has been in some form of production off and on for since about 1938. We feel that the south structure at this point is separated from the producing wells up to the north.

Q. Let me ask you this: Upon what structure is the map imposed?

A. This would be what I refer to as the south area.

Q. Yes, sir, this is the top of the Santa Rosa formation --

A. This is the top of the Santa Rosa, yes. Q. And that Santa Rose formation is a  $CO_{2}$ bearing sand, is it?

A. That's correct.

reporting service General Court Reporting Service Santa Fe, New Mexico 87501 1

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Page Are there any other COL-bearing sands in 0. 2 this area? 3 A, Yes. We have the Tubb, which none of these wells have penetrated the Tubb. 5 At what depth would you encounter the Tubb Q. production? 7 About 21 - 2200 feet. A. And at what depth would you encounter the Q. 9 Santa Rosa production? 10 At about 8-900 feet. A. 11 Would you first of all, Mr. Lambert, ident-**Q.** 12 ify for me what has been outlined by the red outline? 13 This is an area that we feel is productive A. 14 in this Santa Rosa with the information that we have at the 15 present time. 16 Describe for me now the contours on the Q. 17 structure map contained within that red boundary. 18 A. Well, the -- we have this on a 50-foot con-19 tours on top of the Santa Rosa. 20 In your opinion, Mr. Lambert, are you likely Q. 21 to encounter CO production from the Santa Rosa formation at 22 depths of greater than 3700 feet? 23 No, I don't -- no, I don't think sc. λ. 24 **()**. All right. What is the range of depth, 25 then, of the Santa Rosa formation within the red boundaried

reporting service read Reporting Service Sente Fe, New Mexico 87501

1 area in which the Santa Rosa CO1 production is contained? A. These wells would be from 850 to 950 feet. Q. In your opinion, Mr. Lambert, is the proposed outlined area a reasonable configuration which contains a logical proportion of acreage to be dedicated to the proposed CO1 Pool? We feel that it is, yes, sir. A. Would you describe for me now what, in your <u>0</u>. 9 opinion, and the reasons for that opinion, separate the pro-10 posed pool from production to the north? 11 The difference in the elevation, the field A. 12 that is on top of the sand. It appears that we do have two 13 separate reservoirs, plus we have the dry hole here that is 14 adding to that as a separation. 15 The dry hole in Section 21? 0. 16 That's correct. A. 17 Do you know approximately when that well Q. 18 was drilled? 19 In the late '30s, '39, I'm going to say. A. Most of these wells were drilled from '38 to '40. 20 21 Q. By most of the wells, do you mean the wells 22 contained on this exhibit? 23 Yes, that's correct. A. 24 And that includes the wells within the 0. 25 bounded area outlined in red?

8

Pag

reporting service General Court Reporting Service General Court Reporting Service 87501

Yes. 1 A. 2 Q. Would you go to Section 27 for me and 3 identify that well for me? A. That is the State No. 1 and it is now 5 producing. We -- the pressure decline since we have kept the -- well, since October of '78, well, we've had good --6 excellent daily records and pressure data, indicate that this 7 well is -- the well is declining very rapidly, and we are --8 9 we do have some doubts, extreme doubts, that we are actually draining 160 acres with this well. 10 11 Do you have an opinion as to how many acres Q. you're actually draining by the No. 1 State Well? 12 13 At this point closer to 40 acres. A. 14 And when was that well completed? 0. 15 The approximate date? 16 Approximately in 1938. A. 17 Where is your COL plant? I assume you have Q. 18 one. It's very near this well. It's in the same A. 19 40-acre block. 20 How many wells are hooked into that plant? 21 Q, Five wells. 22 A. How about this well in Section 34? 23 Q, In 34 the well, we have very little, prac-24 A. 25 tically no data on as far as production or pressure. It did

NAMES &

10 1 produce in the '30s, late '30s, early '40s, connected with 2 an ice plant, and has been plugged and abandoned. Õ. Who operates that section, do you know? A. The operator of that section is Amoco. 5 If you'll look down in the southeastern Q. 6 portion of your plat, there is a No. 1 Meill Meill in Section 7 1? 8 Yes, sir. A. Would you describe that well for me? Q. 10 That would be the same -- in the same cate-A. 11 gory as the previous well. Both of them were connected to 12 an ice plant. We have no data that's reliable from these 13 wells. 14 Q. Do you have any production history from 15 that well? 16 No, we do not. A. 17 Would you go back up now to Section 32. Q. 18 There are two wells in that section. Would you describe for 19 us the Neill-Harris Mell? 20 The Neill-Harris Well was, as far as the A. 21 records indicate, was abandoned because of depletion, or what 22 appeared to be depletion. The 1-A Gonzales Well is still 23 producing. 24 And who is the operator of that well? 0. 25 A. We are the operator.

General Court Reporting Service General Court Reporting Service South Fe, New Mexico 8750

1 CQ-In-Action, then, is the only operator 0 2 within the proposed pool. 3 That's correct. A. Current operator. Q. That's correct. I might make a correction A. on 34. Amoco has the lease on that section. 6 7 Q. I meant to say operator with producing wells 8 Would you refer to Exhibit Number Two and identify that? 9 This is a lease ownership map of the general Α. 10 area. 11 Q. Would you describe for me the color code 12 used in the lease map? 13 The blue is Amoco. The yellow is CO2-In-A. 14 Action. The white is still Federal KGS land, and the pink 15 is an individual in El Paso, and the green is Amerada Hess. 16 Q. Now if you'll look at both Exhibits One 17 and Two, Mr. Lambert, would you identify for me the acreage 18 dedicated to the No. 1 State Well? The No. 1 State Well has 40 acres dedicated 19 A. to it, which would be the east half of that 80-acre block. 20 21 Isn't the current statewide rule for CO 2 Q. 22 wells 160 acres? 23 Yes, but when these wells were drilled it A. 24 was 40. 25 I understand. All right. What acreage is Q.

reporting service General Court Reporting Service Senta Fe, New Mexico 875

12 dedicated to the Gonzales 1-A Well in Section 32? 1 2 That 40 acres which is the northeast quarter A. 3 of this 160 that it's in. And that well was also drilled prior to <u>Q</u>. the statewide rules on spacing. 5 A. That's correct, yes, sir. All right. Would you describe for the Q. Examiner what your proposed plan of development is for this 8 9 new pool? 10 We would like to drill a maximum of two A. 11 wells on basically 40-acre spacing. That would be in the southeast quarter of the southwest quarter of 27 and the 12 13 northeast quarter of the southwest quarter of 27. 14 What would be the purpose of those two Q. 15 wells? 16 A. To produce these wells and gather data, 17 production data, pressure data, and come up with an answer 18 that we don't have from this well as to what we can drain 19 and if 160 acres is -- can be drained by one well. What period of time do you think would be 20 Q. 21 a reasonable period in which to drill, complete, produce, 22 and evaluate the information from those two wells? 23 At this time we think a year would be A. 24 enough. 25 Would you please refer to what I've marked Q.

**reporting service** Genel Court Reporting Service Sasta Fa, New Maxico 8750

		Page13
	1	as Exhibit Three and identify that?
	2	A. Exhibit Three is a production decline curve
	3	and this, here again, this is in the period of time where we
	4	have the complete and accurate records. As you can see, this
	5	well right now indicates that somewhere around 58,000 Mcf
	6	will be the well will be abandoned. On just volumetrics
	7	with the pressure data that we have, somewhere in the range
	8	of 76,000 Mcf would be a normal for 40 acres.
87501	9	Q. You're saying an abandonment pressure of
Bervice Nexton 8 W Mexton 8	10	what?
Orting 801 poring Service na Fe, New Me	11	A. 10 pounds.
	12	Q. Is this No. 1 State Well capable of making
Le la	13	a 40-acre allowable?
Graver	14	A. At this time?
C	15	(). Yes, sir.
	16	A. Yes, yes, it would be.
	17	Q. Now, you projected your production decline
	18	curve to an abandonment pressure of 10 pounds.
	19	A. Uh-huh.
	20	$\mathfrak{Q}$ What would be the total estimated production
	21	by the time of the abandonment pressure?
	22	A. 58,000 Mcf.
	23	0 And according to your calculations, what
	24	would be the volume required in order to drain a 40-acre
	25	tract?

ч .

1

.

•

----

Page\_\_\_\_\_14\_\_\_\_

Some 76,000.

A.

A.

2

3

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

O So may we conclude that this well will not drain 40 acres?

At this time, yes.

6 0 Would you refer to what we've marked as
6 Exhibit Number Four and identify that?

A. This is -- and here we have to use some imagination and also we are guessing at some of these porosities, but these are based on sample descriptions as far as porosities, water saturation are strictly a guess. These wells have no electric logs, and based on an estimated porosity of 40 percent with a water saturation of 25 percent, bottom hole pressures of 50 psi, these are strictly volumetric calculations. On the State well with 52 feet of pay, the 40 acres would contain, with the present pressure that we have, 76,108 Mcf. 160 acres would contain 304,432 Mcf, and we have the other wells, for the other Gonzales Well, the Well A-1, calculated on this basis it has 40 acres with 51,227 and at 160, 204,906.

Q. Mr. Lambert, do you have an explanation for the fact that the State No. 1 Well with 52 feet of net sand --A. Yes.

23 <u>0</u> -- is only a third or a fourth the producer 24 that the Gonzales Well is, and that well only has 35 feet of 25 pay?

reporting service and Court Reporting Service Santa Fe, New Mexico 875(

Book and the second

That is correct. These are based on -- see, A. we had a higher pressure on the Gonzales than we do on the State Well.

At this point, Mr. Lambert, are you able Q. to project whether the next well is going to be more like the State No. 1 Well or like the Gonzales one, anyway?

A. No, we have no data to predict that except the area that has the -- that we would like to evaluate, is near the center of the structure here, and that's where the State Well is.

Do you have any reason to believe that the Q. State No. 1 Well was damaged in any way when it was originally completed and produced?

A. No evidence of that. They were all completed in the same manner.

In fact, the reason for the proposed tempo-Q. rary pool rules is to allow you an opportunity to drill that next well and to determine what a new well would drain in terms of acreage.

That's -- that's the data we need at this A. time, yes, sir.

22 And in your opinion will approval of that Q. 23 type of application be in the best interests of conservation, 24 the prevention of waste, and the protection of correlative rights?

1

2

3

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

·~~,		1	A. We feel that it will, yes, sir.			
		2	0. Now let me see if I understand your propo-			
		3	sal. You're proposing that the pool be spaced on 160 acres			
		4	with a provision within the pool rules to allow for well			
		5	density based on 40-acre tracts.			
		6	A. That's correct.			
	<i></i>	7	Q. For a temporary period of one year.			
		8	A. Right.			
	87501	9	Q. And that at that time you would come in			
•	Bervice Vice Mexico 8	10	and hope to sustain your burden of proof to establish that			
	5 2 mm	11	the one well will drain 40 acres or in fact may drain 160,			
~	reporting Reporting S Sub Fe No	12	and at that time we can set permanent pool rules.			
er an d		13	A. That is correct.			
	Grand	14	Q. And your proposal would include the			
		15	drilling of not more than two wells.			
		16	A. Correct,			
		17	Q. And those two wells would be located in			
		18	the northeast quarter of the southwest quarter and in the			
		19	southeast quarter of the southwest quarter of Section 27.			
		20	A. Correct.			
		21	0. That will be the extent of your develop-			
		22	ment.			
		23	A. Yes, sir.			
		24	Q. Now, do you have any proposal with regards			
		25	to the location of those wells?			

Page

1 At this point, near the center of the A. 2 quarter, not closer than 330 from a quarter section line, 3 or 40-acre spacing line. 4 I think you had one last exhibit there, Mr. Q. 5 Lambert. You had a tabulation of some production. 6 Yes, that is. A. 7 Would you describe Exhibit Number Five for Q, 8 us? 9 All right. That is the production from Á. 10 the wells exhibited here since October of '78 when we started 11 the operation of the plant and these are based on accurate 12 daily records. 13 <u>0</u>. Would you identify again for the Examiner's 14 benefit which of these wells falls within the proposed pool 15 and which wells are outside the pool? 16 The State No. 1 is in the proposed area and A. 17 the Gonzales A-1. The rest of the wells are not in the pro-18 posed area. 19 Do you have a proposed name for this pool? Q. 20 Yes. We would like to call it the North A. 21 Bueyeros Gas Pool. 22 And were Exhibits One through Four either Q. 23 prepared by you directly or tabulated under your direction 24 and supervision? 25 That is correct, yes. À.

		Page
-	1	MR. KELLAHIN: We move the introduction of
13501	2	Exhibits One through Four.
	3	MR. STAMETS: These exhibits will be ad-
	4	mitted.
	5	
	6	CROSS EXAMINATION
	7	BY MR. STAMETS:
	-8	Q Mr. Lambert, in Section 21, 21 North, 30
	9	East, you show a dry hole identified as Adams and McGahay
ertico	10	No. 1. Did you examine the records on that well?
General Court Reporting Service Santa Fa, New Mexico 87501	11	A. We have the just what's available. The
	12	depth, and I believe what was filed with the State.
	13	Q. Was there an indication that they had
	14	tested the Santa Rosa in this well?
	15	A. It's my understanding that they did, yes,
	16	sir.
	17	Q And what did the records reflect, to your
	18	knowledge?
	19	A. Very little gas; not enough to warrent a
	20	pipeline to it. A show of CO <sub>2</sub> , I believe, was the way it
	21	was reported.
	22	Q. So it's possible that would it be pos-
	23	sible, then, that we really don't have separate pools here,
	24	but we just have a non-commercial in-jet between the two
	25	pools?

4

5

**reporting service** General Court Reporting Service Santa Fe, New Mexico 87:

ĺ

18

Page

A. We could have, possibly have a permeability barrier of some sort right here, or an area that is not connected, as you can see, we could -- we could very well have a connection here. The reason that we suspect that they are divided is because of the, you see, the difference in the depths of the sand. That much difference there, we think there is a possibility they are divided.

Q About the situation in the northern pool, has your operation up there shown you that -- to be draining 160 acres, where you don't need the infill drilling?

A. This is from the volumetric data, which is all we have to go by right now, they indicate that they probably will drain 160 acres.

Q. On your Exhibit Number Four you show a porosity factor of 40 percent. Where did you derive that figure?

A. In one of the old Adams-McGahey reports there was -- some geologist described some of this sand as having 40 percent porosity, 30 to 40, and that is just a figure, really. There's no -- we have nothing to indicate exactly what these porosities are.

Q. Have you drilled any new wells in this area?
A. No, we have not.
Q. So, okay, that's --A. Now, we do have some in the general area but



1

2

3

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

20 Page 1 they are several miles away, some recent drilling, and some of this Santa Rosa will calculate that high on some of these. Not our wells, but they are -- Amoco and Amerada have done 3 some drilling in the area. Now there's some slight difference between Q. what was advertised in this case and what's inside your red 6 7 line. A. Yes sir. a I presume you would ask for no more than Q. 10 is inside your red line. 11 A. No, sir. 12 MR. KELLAHIN: We may have made an error 13 in the red line. Wanted all of Section 1; all of 2, 3, and 14 4. 15 MR. STAMETS: Okay, let me look here at the 16 docket. All right, I don't find Section 4 as having been ad-17 vertised; at least it's not on the docket. MR. KELLAHIN: I don't think that's criti-18 19 cally important to us. The omission of that section is not 20 critical. 21 MR. STAMETS: Okay. 22 MR, KELLAHIN: The north half of Sections 23 10, 11, and 12. 24 MR. STAMETS: Okay, all of 10, 11, and 12 25 were advertised, but you don't want more than the north half?

21 1 MR. KELLAHIN: We felt that would be the 2 logical southern limits of the pool. 3 MR. STAMETS: Okay. MR. KELLAHIN: And then in the top township, 5 we have the south half of Section 20 through 23. MR. STAMETS: Okay, and all of 20 through 7 23 got advertised. MR. KELLAHIN: It was our intent to split those sections in half because we felt that to be the appro-9 10 ximate limits of that permeability barrier, keying on that 11 dry hole. And the application further asked for Sections 26 12 through 35, all of those sections. 13 MR. STAMETS: Okay, those were advertised. 14 I see the red line leaves out Sections 30 and 31. 15 (There followed a discussion 16 off the record.) 17 MR. STAMETS: Okay, so the only thing that 18 would be left out that you would need is the Section 4, and 19 as you indicated, that's not critical to your application. 20 MR. KELLAHIN: I don't believe so. I think 21 if the pool is developed in that direction, we'll have oppor-22 tunity to expand the limits of the pool. 23 MR. STAMETS: Okay. Would you have any ob-24 jection to limiting these special pool rules to the boundary, 25 to anything within the boundaries of the pool? Normally,

		Page22
	1	special rules apply to anything within one mile, but since
	2	you have such a well defined area here, it might be well to
	3	just limit the rules to what's inside the area.
	4	A. That's correct. That would be no problem.
	5	Q. Okay.
	6	MR. STAMETS: Are there other questions of
	7	the witness.
	8	MR. ULVOG: I have a question.
87501	9	MR. STAMETS: Mr. Ulvog.
srvici exico	10	
100 86 Nove Nev N	11	CROSS EXAMINATION
porti teportin anta Fa	12	BY MR. ULVOG:
Lourt A	13	Q. You're proposing the name of the North
General	14	Bueyeros-Santa Rosa Pool, Carbon Dioxide Pool, to this area
	15	outlined by your red line, is that correct?
	16	A. Carl, originally we we thought that all
	17	of this would be referred to North Bueyeros. At this time
	18	I really have no objection either way. We could let it go
	19	for the whole area or just this outlined area.
	20	Q. Well, I think we need to know because if
	21	the if the special pool rules are written they'll be ap-
	22	plied to the pool as created.
	23	A. Well, then let's go with the outlined area.
	24	0. Do you have any idea of what we're going to
	25	call the production that's north of the North Bueyeros?

42

Ĺ

A STATE OF

23 1 A. No, sir. That's coming somewhere down the road, you Q. 3 see. It's producing. Those wells are right on the Ute Creek. A, 5 Let's just call it the Ute Creek. 8 Ω I don't have any objection, but now that's -7 I believe I understood you to say that you consider this to 8 be a separate pay. 9 We suspect that it is at this time. A. porting service 10 Further drilling in the area may prove that that is not correct. 11 Q. But you still want the statewide spacing 12 there? 13 In the outlined area. A. 14 That still would be 160 acres to the north. Q. 15 To the north, yes, sir, no change there. A. 16 MR. ULVOG: That's all I have. 17 MR. STAMETS: Ms. Trigg, do you have some 18 questions? 19 MS. TRIGG: One or two. 20 21 CROSS EXAMINATION 22 BY MS. TRIGG: 23 Mr. Lambert, explain to me again exactly Q, 24 what your application and proposal is with respect to the 25 red outline line.

A. That this be a proposed area to --- with an application to -- or right to drill the two locations which I described, and actually have some 40-acre units inside the 160, and have one year to test these wells and bring the results in to the Commission to -- and study this data, and then determine whether the 160 is the proper spacing in this area or not.

Q. Upon a showing in a year that 40-acre spacing, at least as it applies to the acreage surrounding the State No. 1, if 40 acres did effectively -- was effectivel drained by one well, then you want to apply those special field rules at that time within this whole outlined area?

A. Yes, if it was justified, by our data.
Q. Based just on these -- these wells here?
A. That is correct.

Q And you feel as if the information from the Neill-Harris, from the  $\Lambda$ -1, or 1-A Gonzales, South Kerlin, and the Neill Smith & Mierra, would justify including this amount of acreage within it?

A. I think that with -- with the data that we want to acquire we can come up with a reasonable spacing and definite field rules for this -- for this area, which right now we don't have.

<u>Q</u> But again, these would not apply to this northern portion which you consider a separate pool?

**Reporting Service** General Court Reporting Service Santa Fe, New Mexico 8750 2

3

5

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25 A. At this time, yes. Q. Mr. Lambert, isn't there a well in the southwest quarter of the southwest quarter of Section 28? I believe that was called the Gonzales No. 1. A. Yes. That's been --MR. STAMETS: Ms. Trigg, what's the location of that well? MS. TRIGG: It's not shown on the map. 9 MR. STAMETS: Okay, southwest southwest of 10 28? 11 MS. TRIGG: Yes, It was 660 from the south 12 660 from the west. 13 I'm at a loss right now. I think there --A. 14 you may be right, but it's a dry hole, as far as I know. 15 But you don't recall? Q. 16 I don't recall it, no. A. 17 Likewise, wasn't there one drilled this 0. 18 summer in Section 36 that's not shown on your --19 That is correct. I did not have that at A. 20 the time this map was drawn. We didn't have that information 21 What do you know about that well? 0. 22 Only that it -- it does test some CO2. A. 23 It blows down rather rapidly. I understand it has just sur-24 face casing set; was drilled then with air; and does have a 25 wellhead on it, or a sledge with a valve, and will accumulate

reporting service

		Page26			
1	some CO <sub>2</sub> over a p	eriod of time and blow down rather rapidly.			
2	Q.	Have you contacted the offset operators to			
3	the two proposed wells?				
4	A.	No, I have not.			
5	Q	But they've not objected?			
6	A.	No. Not formally. They are aware of what			
7	we're doing, but I have not contacted them formally or by				
8	letter.				
9	Qi -	All right. Now, you state that you have a			
10	producing plant close to the State No. 1.				
11	А.	Yes.			
12	Q.	What is your total production from that			
13	plant?				
14	A.	At this time our maximum production is			
15	about 56 tons a d	ay.			
16	Q	How many			
17	А.	All liquid CO <sub>2</sub> .			
18	Q.	How many Mcf is that?			
19	А.	That is that's about 960,000.			
20	Q.	And you say that you're presently producing			
21	from five separate wells?				
22	А.	Yes, that's correct.			
23	Q.	Are those adequate to supply the amount of			
24	gas required?				
25	A.	Yes, we're having no problem with our plant			
[]					

reporting service General Court Reporting Service General Court Reporting Service 87501

1
capacity at this time.

A.

1

2

3

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Q So in fact your application is one for the-for the development of these two wells on a temporary basis, is just to test the area.

And to collect test data.
A. That is correct.
Q. Do you have any indication as to what -or thoughts as to what you might do vis-a-vis the offset
operators if it were shown these wells drilled something more
than 40 acres?

That's correct.

A. I think that would be determined by the Commission at the time that we come back with our data.

Q. Okay.

RECROSS EXAMINATION

BY MR. STAMETS:

<u>0</u>. I'd like to clarify something now resulting
 from Ms. Trigg's questioning.

The application would result in an order coming out to allow you infill drilling anywhere within the pool that would be defined, but your intent is only to drill the two wells during the coming year.

A. That is correct. I would -- I would specify
that in the -- or I would certainly go along with putting

Central Court Reporting Service General Court Reporting Service Seats Fo, New Martico 87501

AND A PERSON AND A

that in this application, and specify these two locations. MR. KELLAHIN: The reason that's done, if I may, please, Mr. Examiner.

Page

23

MR. STAMETS: Okay.

MR. KELLAHIN: Ms. Trigg represents the surface owner of some of the tract that is currently under lease to Amoco, and is an offset interest owner, and as part of the agreement with that interest owner, we have selected certain areas to specifically drill and test, and although orders normally issued will allow us to infill in any portion of the reservoir, it is our agreement with him that we would select only those two locations during the one-year test period, and that if additional drilling is felt necessary, we would again apply to the Commission and give them notice of hearing and opportunity to object to the plan.

MS. TRIGG: Mr. Examiner, if I might add, I'm certainly not a geologist or a reservoir engineer. Our concern, of course, was the vast amount of acreage that is to be included in the order. Certainly upon -- upon proof that these wells only drill 40 acres, it seems to me would be the time to enlarge this area. I fail to see how you can include some 10,000 acres based on three wells. As you can see, this north of the proposed drillsites, we have three wells, two of which are on 40-acre spacing. How are we to know that there might not be some delineation further

Ceneral Court Reporting Bervice General Court Reporting Service Santa Fe, New Mexico 87501 1

2

3

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

down in this field? It does seem, and the concern was, that this vast amount of acreage included within this application, based on a showing of only the two additional wells to be drilled was -- was a bit unreasonable.

29

MR. STAMETS: We -- as I read the proposal, it would not prohibit any of the other owners in this particular described pool from drilling up to four wells on -- on 160 acres tract.

Is there any objection to that? MS. TRIGG: As an operator? I think one would have to talk to an operator concerning that, I think Amoco Production Company is the only operator and, as you know they're not interested in Santa Rosa gas. Their interest is is the gas in the Tubb formation.

MR. STAMETS: I was trying to figure out what kind of an order to write in this case.

17 MS. TRIGG: I would ask that the order be 18 limited specifically to that 160-acre -- 160 acres in Section 19 27 in the southwest quarter. Then if at such time it looks 20 as if the evidence justifies expanding that, I think that would -- could come up before the Commission in the next year, 22 and another application be made.

23 MR. KELIAHIN: I would object to that. 24 We've made substantial concessions to Ms. Trigg's client 25 already on the location and drilling of number of wells to

porting service

10

11

12

13

14

15

16

develop this area, and it comes as something of a surprise at this late date to realize that now they want to limit the boundaries of the pool. The logical configuration of a pool, I think, has been reasonably defined by the drilling of the dry wells as proposed -- as the outline proposed, to include those areas.

Page

The point is, I think it's a logical configuration; that we ought to control that amount of acreage in terms of providing spacing on 160 acres, with the capacity 10 to infill drill, knowing that this operation, apparently the only one of concern to anyone that's actively going to do 12 something, is going to limit his development at this point to 13 those two 40-acre tracts. As a practical matter it might not 14 mean anything, but I think in order to be consistent with the 15 past special pool rules that the Commission has entered, it 16 is necessary to look at what is a logical configuration for a proposed pool, and not just specifically limit yourself to 18 a 160-acre tract within a defined area and then next month be proposed by someone else in an offsetting section that we 19 20 go to 320. You're boxing yourself into a problem, I think. MR. STAMETS: We'll certainly take all those things into consideration when we're writing an order in 23

this case and to face all of these issues to the greatest benefit to all.

One other thing, Mr. Lambert. Did you in-

service

1

8

9

11

17

21

22

24

25

Page 1 dicate that you wanted to be able to locate your wells as 2 close as 330 to the outer boundary of the 160-acre tract, 3 or was that 660 from the outer boundary and 330? Our plans at the moment are --- are 660 on 4 A. 5 this first proposal. Now, I had asked for the 330, no closer than 330 to this boundary line in case the first well indi-6 7 cated that we might to get somewhere other than the center 8 of that 40 acres. I really have no objection to that. Right 9 10 now the 660 is all right, but I had asked for the 330. 11 MR. STAMETS: Any other questions of the 12 witness? He may be excused. 13 Is there anything further in this case? 14 The case will be taken under advisement. 15 16 (Hearing concluded.) 17 18 19 20 21 22 23 24 25

1

2

3

â

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

wice • Mexico 87501

reporting service

I, SALLY W. BOYD, a Certified Shorthand Reporter, DO HEREBY CERTIFY that the foregoing and attached 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 from my notes taken at the time of the hearing.

Sally W. F. yd C.S.R. Sally W. Boyd, C.S.R.

that the foregoing is I do hereby car a com the Licit Examiner heard Oil Conservation Division

Page 3 of 4

Examiner Hearing - Wednesday - November 28, 1979

CASE 6745: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the E/2 of Section 28, Township 23 South, Range 24 East, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

<u>CASE 6746</u>: Application of Yates Petroleum Corporation for compulsory pooling and an unorthodox location, Eddy <u>County</u>, New Mexico. Applicant, in the above styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Peunsylvanian formations underlying the S/2 of Section 31, Township 18 South, Range 26 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1100 feet from the West line of said Section 31. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof an well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

- CASE 6747: Application of Yates Petroleum Corporation for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the S/2 of Section 23, Township 18 South, Range 25 East, to be dedicated to a well to be drilled at an unorthodox location in the center of Unit P of said Section 23. 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6748: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Rio Peccos "MN" Fed. Well No. 1, a Morrow test to be drilled 1980 feet from the South line and 1100 feet from the East line of Section 29, Township 18 South, Range 27 East, the S/2 of said Section 29 to be dedicated to the well.
- CASE 6749: Application of Petro-Lewis Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Penrose Skelly, Blinebry, and Drinkard production in the wellbore of its Warlick Well No. 3 located in Unit P of Section 18, Township 21 South, Range 37 East.

CASE 6750: Application of CO<sub>2</sub>-In-Action, Inc. for creation of a new carbon dioxide gas pool and special pool rules, Harding County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the North Bueyeros-Santa Rosa CO<sub>2</sub> Gas Pool comprising all or parts of Sections 1, 2, 3, 10, 11, and 12, Township 20 North, Range 30 East and Sections 20 thru 23 and 26 thru 35. Township 21 North, Range 30 East, and the promulgation of special rules therefor including a provision for 160-acre spacing units with the option to drill on 40 acres, and with well locations as close as 330 feet to the unit boundary.

CASE 6725: (Continued from November 14, 1979, Examiner Hearing)

Application of Tenneco Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 291.23-acre non-standard gas proration unit comprising the W/2 of Section 6 and the NW/4 of Section 7, a 347.58-acre unit comprising the W/2 of Section 19 and the NW/4 of Section 30, and a 375.17-acre unit comprising the SW/4 of Section 30 and the W/2 of Section 31, all in Township 29 North, Range 8 West, Basin-Dakota Pool, each unit to be dedicated to a well to be drilled at a standard location thereon.

CASE 6751: Application of Tenneco Oil Company for the rescission of special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of the special pool rules for the Catelaw Draw-Morrow Gas Pool to provide for 320-acre spacing rather than 640 acres. In the absence of objection, the pool rules will be rescinded and the pool placed on standard 320-acre spacing for Pennsylvanian gas pools rather than the present 640-acre spacing.

CASE 6357: (Reopened and Readvertised)

In the matter of Case 6357 being reopened pursuant to the provisions of Order No. R-5853 which order established temperary special rules and regulations for the South Peterson-Pennsylvanian Pool, with provisions for 80-acre spacing. All interested parties may appear and show cause why the South Peterson-Pennsylvanian Pool should not be developed on 40-acre spacing units.



Í

Charles Con

тврыя

## CHESTER LAMBERT

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Stamets	-18
Cross Examination by Mr. Ulvog	22
Cross Examination by Ms. Trigg	23
Recross Examination by Mr. Stamets	27

Pao

EXHIBITS

Applicant Exhibit One, Structure Map	6
Applicant Exhibit Two, Map	11
Applicant Exhibit Three, Document	1.3
Applicant Exhibit Four, Document	14
Applicant Exhibit Five, Tabulation	<u>1</u> 7



**WART** 

A STATE A STATE

and the second

	Proc
1	
2	ME. SUMMOS: We'll call next Case 6750.
3	MR. PADILLA: Application of CO - In-Action,
····	Inc. for creation of a new carbon dioxide gas pool and
4	special pool rules, Harding County, New Mexico.
5	MR. STAMDIS: Call for appearances in this
6	case.
7	MP. KELLAHIN: I'm Tom Kellahin of Santa
8	Fe, New Mexico, appearing on behalf of the applicant, and I
9	have one witness.
10	MR. STAMETS: Any other appearances in this
11	case?
12	MS. TRIGG: Yes. Sally Trigg from Mosquero
13	New Mexico, appearing on behalf of Richard Russell. I don't
14	know I don't have any witnesses but I may want to cross
15	examine.
16	MR. STAMETS: Okay. Any other appearances?
17	I'd like to have the witness stand and be sworn, please.
18	
19	(Witness sworn.)
20	
21	CHESTER LAMBERT
22	being called as a witness and having been duly sworn upon his
23	oath, testified as follows, to-wit:
24	
25	

1

reporting service court Reporting Service South South Fe, New Mexico 87501

1

1 DIRICT LEAMEDARION 2 BY MR. KELLAHIN: 3 you're employed, and in what dapacity? I am Chester Lambert. I've Vice President Α. 6 of CQ -In-Action, a subsidiary of Baker and Taylor Drilling 7 Company, of which I am Vice President, and head of the geology 8 department of our oil and gas producing. Q. Where is your home office? 10 Λ. Amarillo. 11 Is that where you're based? Q. 12 Yes. Ŀ. 13 Q. Mr. Lambert, have you testified before the 14 Oil Conservation Division? 15 A. No, I have not. 16 Would you briefly summarize for benefit of Q, 17 the Examiner what the nature of this application is and what 18 experience you've had with the COg production? 19 The nature of this request is to do some A. 20 infill drilling for testing purposes and to accumulate some 21 data that we can rely on in this old field. 22 Where is this field located? Q, 23 It's in Harding County, New Mexico, near λ. 24 Bueyeros. 25 How long has  $CO_q$  -In-Action owned or operated Ũ.

reporting service Court Reporting Service Sents Fe, New Maxico 873

1 this CO 2plant and facility? 2 We've operated it since --- since October A, 3 of '78, and we purchased it, I believe, just a month or so before. 5 How long have you been employed by CO 21n-۵. 6 Action? 7 Since its --- since it's been formed, which A. 8 was in -- the company is now two years old. 9 And before that where were you employed? Q. 10 Before that I was with Baker and Taylor ۸. 11 for thirteen years. 12 In what capacity, Mr. Lambert? Q. 13 As geological engineer and into Vice Presi-A. 14 dent over contracts and geological. 15 MR. KELLAHIN: I tender Mr. Lambert as an 16 expert witness. 17 MR. STAMETS: Okay. Mr. Lambert, I presume 18 you're testifying today as an expert geologist? 19 λ. As a geologist, yes, sir. 20 MR. KELLAHIN: Mr. Lambert does not hold 21 a professional degree. 22 A. I have twenty-three years experience in 23 some phase of petroleum geology. 24 MR. STANDYS: Okay, so you'll be testifying 25 as a practical geologist ---

reporting service General Court Reporting Service Sana Fa, New Mexico 87501

The second second

1 Yos, sir. Α. 2 MR. STAMITC: -- and your experiences have 3 been varied experience in oil and gas operations? Yes, sir, from well-sitting to evaluating λ. 5 prospects. 6 M2. STAMETS: I believe this witness is 7 considered gualified as a practical oil man and he should be 8 able to cover the matters before us today. 9 Mr. Lambert, let me direct your attention - <u>Ç</u>. 10 to what has been marked as the Applicant Exhibit Number One, 11 and would you tell me what this exhibit is? 12 λ. This is a structure map of the area that 13 has been in some form of production off and on for since 14 about 1938. We feel that the south structure at this point 15 is separated from the producing wells up to the north. 16 Let me ask you this: Upon what structure Q. 17 is the map imposed? 18 This would be what I refer to as the south λ. 19 area. 20 Yes, sir, this is the top of the Santa Rosa Q. 21 formation ---22 This is the top of the Santa Rosa, yes. Δ. 23 And that Santa Rose formation is a  $CO_{j}$ -Q. 24 bearing sand, is it? 25 That's correct. З.

1 Are there any other Cos-bearing sands in 0 2 this area? 3 Yes. We have the Subb, which none of these A. . . . wells have penetrated the Tubb. 5 At what depth would you encounter the Tubb Q. 6 production? 7 Nout 21 - 2200 feet. Α. 8 And at what depth would you encounter the Q. 9 Santa Rosa production? 10 At about 8-900 feet. λ. 11 Would you first of all, Mr. Lambert, ident-0. 12 ify for me what has been outlined by the red outline? 13 Α. This is an area that we feel is productive 14 in this Santa Rosa with the information that we have at the 15 present time. 16 Describe for me now the contours on the Q. 17 structure map contained within that red boundary. 18 Well, the -- we have this on a 50-foot con-Α. 19 tours on top of the Santa Rosa. 20 In your opinion, Mr. Lambert, are you likely Q. 21 to encounter CO production from the Santa Rosa formation at 22 depths of greater than 3700 feet? 23 No, I don't -- no, I don't think so. Α. 24 All right. What is the range of depth, <u>n</u> 25 then, of the Santa Rosa formation within the red boundaried

reporting service Generations Service Santa Pa, New Mexico 87501

M. N. X. M. N. X.

1 area in which the Santa Rose CO  $_{j_{\rm c}}$  production is contained? 2 These wells would be from 350 to 950 feet. A. 9. In your opinion, Mr. Lambert, is the proposed outlined area a reasonable configuration which contains 5 a logical proportion of acreage to be dedicated to the proposed COg Pool? We feel that it is, yes, sir. **Ā.** 8 Would you describe for me now what, in your Q. 9 opinion, and the reasons for that opinion, separate the pro-10 posed pool from production to the north? 11 The difference in the elevation, the field Α, 12 that is on top of the sand. It appears that we do have two 13 separate reservoirs, plus we have the dry hole here that is 14 adding to that as a separation. 15 The dry hole in Section 21? Q 16 That's correct. A. 17 Do you know approximately when that well Q. 18 was drilled? 19 In the late '30s, '39, I'm going to say. A. 20 Most of these wells were drilled from '38 to '40. 21 By most of the wells, do you mean the wells Q. 22 contained on this exhibit? 23 Yes, that's correct. Α, 24 And that includes the wells within the О, 25 bounded area outlined in red?

reporting service General Court Reporting Service Santa Fe, New Mexico 87501

1 Δ. Yon. 2 O. Yould you go to Section 27 for no and 3 identify that wall are may "hat is the State Co. 1 and it is now Α. 5 producing. We -- the pressure decline since we have kept 8 the -- well, since October of '78, well, we've had good --7 excellent daily records and pressure data, indicate that this 8 well is -- the well is declining vory rapidly, and we are --3 we do have some doubts, extreme doubts, that we are actually 10 draining 160 acres with this well. 11 Do you have an opinion as to how many acres Q. 12 you're actually draining by the No. 1 State Well? 13 A. At this point closer to 40 acres. 14 Q. And when was that well completed? 15 The approximate date? 16 Approximately in 1938. A. 17 Where is your CO<sub>k</sub> plant? I assume you have Q. 18 one. 19 A. It's very near this well. It's in the same 20 40-acre block. 21 Q. How many wells are hooked into that plant? 22 Five wells. λ. 23 How about this well in Section 34? Q. 24 a. In 34 the well, we have very little, prac-25 tically no data on as far as production or pressure. It did

Cancel Court Reporting Service Cancel Court Reporting Service Santa Fo, New Mexico 87501

1 produce in the '30s, late '30s, early '40s, connected with an ice plant, and has been plugged and abandoned. Who operates that section, do you know? **Q**. The operator of that section is Amoco. λ. If you'll look down in the southeastern Q. portion of your plat, there is a No. 1 Neill Well in Section 7 1? Yes, sir. Α. 9 Would you describe that well for me? Q. 10 That would be the same -- in the same cate-Α. 11 gory as the previous well. Both of them were connected to 12 an ice plant. We have no data that's reliable from these 13 wells. 14 Do you have any production history from Q. 15 that well? 16 No, we do not. A. 17 Would you go back up now to Section 32. Q. 18 There are two wells in that section. Would you describe for 19 us the Neill-Harris Well? 20 The Neill-Harris Well was, as far as the Α. 21 records indicate, was abandoned because of depletion, or what 22 appeared to be depletion. The 1-A Gonzales Well is still 23 producing. 24 And who is the operator of that well? Ç. 25 Ă. We are the operator.

1 Con-In-Lation, then, is the only operator e 2 within the proposed pool. 3 Shet's correct. Č. Current operator. 0 Α. "hat's correct. I might make a correction 6 on 34. Amoco has the lease on that section. 7 I meant to say operator with producing wells 0 Would you refer to Fishibit Number Two and identify that? This is a lease ownership map of the general A. 10 area. 11 Would you describe for me the color code Q 12 used in the lease map? 13 The blue is Amoco. The yellow is CO 2-In-A. 14 Action. The white is still Federal KGS land, and the pink 15 is an individual in El Paso, and the green is Amerada Hess. 16 Now if you'll look at both Exhibits One Q. 17 and Two, Mr. Lambert, would you identify for me the acreage 18 dedicated to the No. 1 State Well? The No. 1 State Well has 40 acres dedicated 19 A. to it, which would be the east half of that 80-acre block. 20 21 Isn't the current statewide rule for CO 2 Q. 22 wells 160 acres? 23 Yes, but when these wells were drilled it λ. 24 was 40. 25 I understand. All right. What acreage is 0

dedicated to the Contales J-A Vell in Section 32?

A. What 40 acres which is the northeast quarter
3 of this 160 that it's in.

And that well was also drilled prior to
the statewide rules on spacing.

A. That's correct, yos, sir.

0. All right. Would you describe for the Examiner what your proposed plan of development is for this new pool?

A. We would like to drill a maximum of two wells on basically 40-acre spacing. That would be in the southeast quarter of the southwest quarter of 27 and the northeast quarter of the southwest quarter of 27.

0. What would be the purpose of those two wells?

A To produce these wells and gather data, production data, pressure data, and come up with an answer that we don't have from this well as to what we can drain and if 160 acres is -- can be drained by one well.

20 0. What period of time do you think would be
21 a reasonable period in which to drill, complete, produce,
22 and evaluate the information from those two wells?

A. At this time we think a year would be enough.

0

1

6

7

8

9

10

11

12

13

14

15

16

17

18

19

23

24

25

Would you please refer to what I've marked

	l	Page13
	1	as Exhibit Three and identify that?
	2	A Exhibit where is a production decline curve
	3	and this, here again, this is in the period of tike where we
	4	have the complete and accurate records. As you can see, this
	5	well right now indicates that schewhere around 58,000 Mcf
	6	will be the well will be abandoned. On just volumetrics
	7	with the pressure data that we have, somewhere in the range
	8	of 76,000 Mcf would be a normal for 40 acres.
87501	9	0. You're saying an abandonment pressure of
Bervice vice Mexico 8	10	what?
	. 11	E. 10 pounds.
porti taportin fe	12	0. Is this No. 1 State Well capable of making
Contraction	13	a 40-acre allowable?
General Co	14	At this time?
	15	Q. Yes, sir.
	16	A. Yes, yes, it would be.
	17	0. Now, you projected your production decline
	18	curve to an abandonment pressure of 16 pounds.
	19	A. Uhhuh.
	20	Q What would be the total estimated production
	21	by the time of the abandonment pressure?
	22	A. 58,000 Mcf.
	23	0 And according to your calculations, what
	24	would be the volume required in order to drain a 40-acre
	25	tract?

. U.

A REAL PROPERTY AND

ĺ

Page\_\_\_\_\_1.4\_\_\_

Sere 76,000.

Å.

3

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

0. So may we conclude that this well will not drain 40 acres?

A. At this time, yes.

9. Fould you refer to what we've marked as Exhibit Number Four and identify that?

A This is -- and have we have to use some imagination and also we are guessing at some of these porosities, but these are based on sample descriptions as far as porosities, water saturation are strictly a guess. These wells have no electric logs, and based on an estimated porosity of 40 percent with a water saturation of 25 percent, bottom hole pressures of 50 psi, these are strictly volumetric calculations. On the State well with 52 feet of pay, the 40 acres would contain, with the present pressure that we have, 76,108 Mcf. 160 acres would contain 304,432 Mcf, and we have the other wells, for the other Gonzales Well, the Well A-1, calculated on this basis it has 40 acres with 51,227 and at 160, 204,906.

0 Mr. Lambert, do you have an explanation for the fact that the State No. 1 Well with 52 feet of net sand --A. Yes.

Q --- is only a third or a fourth the producer that the Conzales Well is, and that well only has 35 feet of pay?

**reporting service** General Court Reporting Service Santa Fe, New Mexico 875 A. "het is correct. These are based on -- see, we had a higher pressure on the Contales than we do on the State Well.

1

2

3

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

At this point, Mr. Lambert, are you able
to project whether the next well is going to be more like the
State No. 1. Well or like the Contales one, anyway?

No, we have no data to predict that except
 the area that has the -- that we would like to evaluate, is
 near the center of the structure here, and that's where the
 State Well is.

Q Do you have any reason to believe that the State No. 1 Well was damaged in any way when it was originally completed and produced?

N No evidence of that. They were all completed in the same manner.

Q In fact, the reason for the proposed temporary pool rules is to allow you an opportunity to drill that next well and to determine what a new well would drain in terms of acreage.

A. That's -- that's the data we need at this time, yes, sir.

22 Q And in your opinion will approval of that 23 type of application be in the best interests of conservation, 24 the prevention of veste, and the protection of correlative 25 rights?

1 we feel that it will, yos, sir. 2. \$ How lot is see 12 i understand your propo-3 sal. You're proposing that the pool be spaced on 100 acres 4 with a provision within the poel sules to allow for well 5 density based on 40-acre tracts. 6 "mat's correct. Δ. 7 ŷ, For a temporary period of one year. 8 Right. λ. 9 And that at that time you would come in Q. 10 and hope to sustain your burden of proof to establish that 11 the one well will drain 40 acres or in fact may drain 160, 12 and at that time we can set permanent pool rules. 13 That is correct. Α. 14 And your proposal would include the Q. 15 drilling of not more than two wells. 16 λ. Correct. 17 And those two wells would be located in Q. 18 the northeast quarter of the southwest quarter and in the 19 southeast quarter of the southwest guarter of Section 27. 20 Correct. λ. 21 That will be the extent of your develop-0. 22 ment. 23 Yes, sir. A. 24 Now, do you have any proposal with regards Э, 25 to the location of those wells?

Page

reporting service General Court Reporting Service Santa Fe New Mexico 8750

1 Ζ. and discovered, uses the conter of the 2 quarter, not closer than 200 from 5 quarter section line, 3 or 40-acre spacing line. 0 I think you had one last exhibit there, Mr. 5 Lambert. You had a tabulation of some production. 6 Yes, that is. *A.* – 7 Would you describe Exhibit Number Five for 0, 8 us? 9 A. All right. That is the production from 10 the wells exhibited here since October of '78 when we started 11 the operation of the plant and these are based on accurate 12 daily records. 13 Q. Would you identify again for the Examiner's 14 benefit which of these wells falls within the proposed pool 15 and which wells are outside the pool? 16 The State No. 1 is in the proposed area and Α. 17 the Gonzales A-1. The rest of the wells are not in the pro-18 posed area. 19 Do you have a proposed name for this pool? Q. 20 Yes. We would like to call it the North Α. 21 Bueyeros Gas Pool. 22 And were Exhibits One through Four either Q. 23 prepared by you directly or tabulated under your direction 24 and supervision? 25 That is correct, yes. З.

Page1
M. M.L. M. Rove the introduction of
Exhibits One through Four.
MR. SPAILYS: These exhibits will be ad-
mitted.
CHOSS EXAMINATION
BY MR. STAMETS:
0. Mr. Lambert, in Section 21, 21 North, 30
East, you show a dry hole identified as Adams and McGahay
No. 1. Did you examine the records on that well?
A. We have the just what's available. The
depth, and I believe what was filed with the State.
Q  Was there an indication that they had
tested the Santa Rosa in this well?
A. It's my understanding that they did, yes,
sir.
$\rho$ And what did the records reflect, to your
knowledge?
A Very little gas; not enough to warrent a
pipeline to it. A show of CO <sub>2</sub> , I believe, was the way it
was reported.
Q So it's possible that would it be pos-
sible, then, that we really don't have separate pools here,
but we just have a non-commercial in-jet between the two
pools?

reporting service General Court Reporting Service Santa Fe, New Mexico 87501

4

A De could have, possibly have a permeability barrier of some sort right here, or en area that is not connected, as you can see, we could --- we could very well have a connection here. The reason that we suspect that they are divided is because of the, you see, the difference in the depths of the sand. That much difference there, we think there is a possibility they are divided.

About the situation in the northern pool,
has your operation up there shown you that -- to be draining.
160 acres, where you don't need the infill drilling?

This is from the volumetric data, which is all we have to go by right now, they indicate that they probably will drain 160 acres.

Q On your Exhibit Number Four you show a porosity factor of 40 percent. Where did you derive that figure?

A. In one of the old Adams-McGahey reports there was -- some geologist described some of this sand as having 40 percent porosity, 30 to 40, and that is just a figure, really. There's no -- we have nothing to indicate exactly what these porosities are.

22 Q Have you drilled any new wells in this area?
23 A. No, we have not.
24 Q So, okay, that's --25 A. Now, we do have some in the general area but

General Court Reporting Service General Court Reporting Service Santa Fe, New Mickico 87501 2

3

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

		Page20
	1	they are several miles ever, some recent drilling, and some
	2	of this Santa Rosa will calculate that high on some of these.
	3	Not our wells, but they are Amoco and Amerada have done
	4	some drilling in the area.
	5	0. Now there's some slight difference between
	6	what was advertised in this case and what's inside your red
	7	line.
-	8	A. Yos sir.
7501	9	Q I presume you would ask for no more than
20 20 20 20	10	is inside your red line.
	11	N. No, sir.
eporting Att. Fe,	12	MR. KELLAHIN: We may have made an error
Sown R	13	in the red line. Manted all of Section 1; all of 2, 3, and
General	14	4.
	15	MR. STAMETS: Okay, let me look here at the
	16	docket. All right, I don't find Section 4 as having been ad-
	17	vertised; at least it's not on the docket.
	18	MR. KELLAHIN: I don't think that's criti-
	19	cally important to us. The omission of that section is not
	20	critical.
	21	MR. STAMETS: Okay.
	22	MR. KELLAHIN: The north half of Sections
	23	10, 11, and 12.
	24	MR. STARES: Okay, all of 10, 11, and 12
	25	were advertised, but you don't want more than the north half?

٩t

1 MG. REALTING the felt that would be the 2 logical southern limits of the pool. MP. STAMETS: Obay. MR. KULLAHIN: And then in the top township, 5 we have the south half of Section 20 through 23. ME. STAMETS: Okay, and all of 20 through 7 23 got advertised. 8 MR. KELLAHIM: It was our intent to split 9 those sections in half because we felt that to be the appro-10 ximate limits of that permeability barrier, keying on that 11 dry hole. And the application further asked for Sections 26 12 through 35, all of those sections. 13 MR. STAMETS: Okay, those were advertised. 14 I see the red line leaves out Sections 30 and 31. 15 (There followed a discussion 16 off the record.) 17 MR. STAMETS: Okay, so the only thing that 18 would be left out that you would need is the Section 4, and 19 as you indicated, that's not critical to your application. 20 MR. KELLAHIN: I don't believe so. I think 21 if the pool is developed in that direction, we'll have oppor-22 tunity to expand the limits of the pool. 23 MR. STAMETS: Okay. Would you have any ob-24 jection to limiting these special pool rules to the boundary, 25 to anything within the boundaries of the pool? Normally,

reporting service General Court Reporting Service Santa Pe, New Mexico 87

Statistics of the second

	Page22_		
1	special rules apply to saything within one mile, but since		
2	you have such a well defined area here, it might be well to		
3	just limit the rules to what's inside the area.		
4	A. That's correct. That would be no problem.		
5	Q Chay.		
6	NR. STAMETS: Are those other questions of		
7	the witness.		
8	MR. ULVOG: I have a guestion.		
9	NR. STAMETS: Mr. Ulvog.		
10			
11	CROSS EMAMINATION		
12	BY MR. ULVOG:		
13	Q You're proposing the name of the North		
14	Bueyeros-Santa Rosa Pool, Carbon Dioxide Pool, to this area		
15	cutlined by your red line, is that correct?		
16	A. Carl, originally we we thought that all		
17	of this would be referred to North Bueyeros. At this time		
18	I really have no objection either way. We could let it go		
19	for the whole area or just this outlined area.		
20	Q. Well, I think we need to know because if		
21	the if the special pool rules are written they'll be ap-		
22	plied to the pool as created.		
23	A. Well, then let's go with the outlined area.		
24	$\mathfrak{g}$ . Do you have any idea of what we're going to		
25	call the production that's north of the North Bueyeros?		
	R		

I

reporting service

4

.

Sec. 14

1 to, shr.  $h_{i}$ 2 what's coming somewhere down the road, you Ũ. 3 see. It's producing. h - Those wells are right on the Ute Creek. 5 Let's just call it the Ste Crock. 6 I don't have any objection, but now that's -Ç. 7 I believe I understood you to say that you consider this to 8 be a separate pay. 9 Ā. We suspect that it is at this time. 10 Further drilling in the area may prove that that is not correct. 11 But you still want the statewide spacing Q. 12 there? 13 In the outlined area. À. 14 Q. That still would be 160 acres to the north. 15 A. To the north, yes, sir, no change there. 16 MR. ULVOG: That's all I have. 17 MR. STAMETS: Ms. Trigg, do you have some 18 questions? 19 MS. TEIGG: One or two. 20 21 CROSS EXAMINATION 22 BY MS. TRIGG: 23 Mr. Lambert, explain to me again exactly Ç, 24 what your application and proposal is with respect to the 25 red outline line.

A NUMBER OF

1 A Shat this be a proposed area to -- with an application to -- or right to drill the two locations which I described, and actually have some 40 acce units inside the 160, and have one year to test these wells and bring the results in to the Compission to -- and study this data, and then determine whether the 160 is the proper spacing in this area or not.

Q. Upon a showing in a year that 40-acre spacing, at least as it applies to the acreage surrounding the State No. 1, if 40 acres did effectively --- was effectivel drained by one well, then you want to apply those special field rules at that time within this whole outlined area?

A. Yes, if it was justified, by our data.
Q. Based just on these -- these wells here?
A. That is correct.

And you feel as if the information from the Neill-Harris, from the A-1, or 1-A Gonzales, South Kerlin, and the Neill Smith & Mierra, would justify including this amount of acreage within it?

20 A. I think that with -- with the data that we
21 want to acquire we can come up with a reasonable spacing and
22 definite field rules for this -- for this area, which right
23 now we don't have.

24 <u>0</u> But again, these would not apply to this
25 northern portion which you consider a separate pool?

**reporting service** *General Court Reporting Service* Senta Fe, New Mexico 8750

MAN DAY

8

9

10

11

12

13

14

15

16

17

18

19

24

Page

which deters, yar. "" Tanhork, isn't there a well in the 0 3 southwest quarter of the southwest cuarter of Section 28? I believe that was called the Sonvales No. 1. Ă. Yes. That's been ---MR. STANETS: No. "rigg, what's the location 7 of that well? 8 MS. TRIGG: It's not shown on the map. 9 MR. STANETS: Okay, southwest southwest of 10 28? 11 MS. TRIGG: Yes. It was 660 from the south 12 660 from the west. 13 I'm at a loss right now. I think there -λ. 14 you may be right, but it's a dry hole, as far as I know. 15 But you don't recall? Q. 16 ð. I don't recall it, no. 17 Q. Likewise, wasn't there one drilled this 18 summer in Section 36 that's not shown on your --19 That is correct. I did not have that at a. 20 the time this map was drawn. We didn't have that information 21 What do you know about that well? 0. 22 Only that it -- it does test some  $CO_2$ . λ. 23 It blows down rather rapidly. I understand it has just sur-24 face casing set: was drilled then with air; and does have a 25 wellhead on it, or a sledge with a valve, and will accumulate

25

reporting seirvice General Court Reporting Service Service Santa Fe, New Mexico 8750.

		Page26
sone CO	2 over a	period of the and blow down rather rapidly.
	Q.	Have you contacted the offset operators to
the two	propose	ed wells?
	<b>A.</b>	No, I have not.
	Q	But they've not objected?
	λ.	No. Not formally. They are aware of what
we're d	oing, bu	at I have not contacted them formally or by
letter.		
	Q	All right. Now, you state that you have a
produci	ng plant	close to the State No. 1.
	Λ.	Yes.
	Q.	What is your total production from that
plant?		· · · · · · · · · · · · · · · · · · ·
	λ	At this time our maximum production is
about 5	6 tons a	a day.
	Q.	How many
	Α.	All liquid CO2.
	0.	Now many Mcf is that?
	Б.	That is that's about 960,000.
	Q	And you say that you're presently producin
from fi	ve sepai	rate wells?
	Δ.	Yes, that's correct.
	Q.	Are those adequate to supply the amount of
gas req	uired?	
	Ĕ.	Yes, we've having no problem with our plan

h

reporting service General Court Reporting Service Sente Fe, New Mexico 87501

ور المراجع الم

		Page 27	
1	capacity at the		
2	ę.	to the fact year application is one for the	
3	for the duraler	ment of these two wells on a terporary basis,	
4	is just to test	: the area.	
5	λ.	That's correct.	
Ì	<u>р</u> .	And to collect test data.	
	Б.	That is correct.	
	Q.	Do you have any indication as to what	
	or thoughts as	to what you might do vis-a-vis the offset	
	operators if it	were shown these wells drilled something more	
	than 40 acres?		
	۸.	I think that would be determined by the	
	Commission at t	the time that we come back with our data.	
	Q.	Okay.	
5	C.		
		RECROSS EXAMINATION	
	BY MR. STAMETS		
	Ņ.	I'd like to clarify something now resulting	
	from Ms. Trigg's questioning.		
		The application would result in an order	
	coming out to a	allow you infill drilling anywhere within the	
	pool that would	a be defined, but your intent is only to drill	
	the two wells a	during the coming year.	
	• 1.1	that is correct. 7 world and the I would apoci	
	that in the	or I would certainly go above with putting	

ų

Ceneral Court Reporting Service General Court Reporting Service Santa Fe, New Mexico 87501

ł

1

that in this applied for, and spucify these two locations. MOL ANTIMES: The reason that's done, if I may, please, Mr. Engliner.

Page.

MR. MONDERS: OKay.

III. EDULATE: Ms. Trigg represents the surface owner of some of the tract that is currently under lease to Amoco, and is an offset interest owner, and as part of the agreement with that interest owner, we have selected certain areas to specifically drill and test, and although orders normally issued will allow us to infill in any portion of the reservoir, it is our agreement with him that we would select only those two locations during the one-year test period, and that if additional drilling is felt necessary, we would again apply to the Cormission and give them notice of hearing and opportunity to object to the plan.

NS. TRIGG: Mr. Examiner, if I might add, I'm certainly not a geologist or a reservoir engineer. Our concern, of course, was the list amount of abreage that is to be included in the order. Certainly upon -- upon proof that these wells only drill 40 acres, it seems to me would be the time to enlarge this area. I fail to see how you can include some 10,000 acres based on three wells. As you can see, this north of the proposed drillsites, we have three wells, two of which are on 40 acre spacing. Now are we to know that there might not be some delineation further

reporting service General Court Reporting Service Santa Fe, New Mexico 875 ł

2

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

down in this field? It does seen, and the concern was, that this vast amount of acreage included within this application, based on a showing of only the two additional wells to be drilled was -- was a bit unreasonable.

MR. STANDES: We -- as I read the proposal, it would not prohibit any of the other owners in this particular described pool from drilling up to four wells on -- on 160 acres tract.

MS. TRIGC: As an operator? I think one would have to talk to an operator concerning that. I think Amoco Production Company is the only operator and, as you know they're not interested in Santa Rosa gas. Their interest is is the gas in the Tubb formation.

Is there any objection to that?

MR. STAMETS: I was trying to figure out what kind of an order to write in this case.

MS. TRIGG: I would ask that the order be limited specifically to that 160-acre -- 160 acres in Section 27 in the southwest quarter. Then if at such time it looks as if the evidence justifies expanding that, I think that would -- could come up before the Commission in the next year, and another application be made.

MR. KELIAHIN: I would object to that. We've made substantial concessions to Ms. Trigg's client already on the location and drilling of number of wells to

General Court Reporting Survice General Court Reporting Service Santa Pa, New Moxico 8750 1

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24
develop this area, and it cover as scrething of a surprise at this late date to realize fast new they want to limit the 3 boundaries of the pool. The legioal configuration of a pool, I think, has been reasonably defined by the drilling of the dry wells as proposed -- as the outline proposed, to include those areas.

The point is, I think it's a logical con-8 figuration; that we ought to control that amount of acreage 9 in terms of providing spacing on 160 acres, with the capacity 10 to infill drill, knowing that this operation, apparently the 11 only one of concern to anyone that's actively going to do 12 something, is going to limit his development at this point to 13 those two 40-acre tracts. As a practical matter it might not 14 mean anything, but I think in order to be consistent with the 15 past special pool rules that the Commission has entered, it 16 is necessary to look at what is a logical configuration for 17 a proposed pool, and not just specifically limit yourself to 18 a 160-acre tract within a defined area and then next month 19 be proposed by someone else in an offsetting section that we 20 go to 320. You're boxing yourself into a problem, I think. 21 MR. STAMETS: We'll certainly take all those 22 things into consideration when we're writing an order in 23 this case and to face all of those issues to the greatest

One other thing, Mr. Lambert. Did you in-

1

2

4

5

R

24

25

benefit to all.

dicate that you wanted to he ship to locate your wells as close as 330 to the outer houndary of the 160-acro tract, or was that 660 from the outer boundary and 330?

A. Our plans at the moment are -- are 660 on this first proposal. Now, T had asked for the 330, no closer than 330 to this boundary line in case the first well indicated that we might to get somewhere other than the center of that 40 acres.

I really have no objection to that. Right now the 660 is all right, but I had asked for the 330.

MR. STAMETS: Any other guestions of the witness? He may be excused.

Is there anything further in this case? The case will be taken under advisement.

(Mearing concluded.)

hEbOuwhele Chibathacyel.

I, SALLY M. BOND, a Certified Shorthand Reporter, DO HEREBY CERTIFY that the foregoing and attached 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 from my notes taken at the time of the hearing.

## Sally W. Boyd, C.S.R.

\_, Examiner

Oll Conservation Division

JASON W- KELLAHIN W, THOMAS KELLAHIN KAREN AUBREY KELLAHIN and KELLAHIN ATTORNEYS AT LAW BOO DON GASPAR AVENUE P. O. BOX 1769 SANTA FE. NEW MEXICO 87501

TELEPHONE 982-4286 AREA CODE 808

Case 6750

November 5, 1979

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

Dear Joe:

Please set the case for hearing on November 28, 1979 which I understand is the next available hearing.

Very truly yours,

Re: CO<sub>2</sub> in Action

Jason Kellahin

JK:mm cc: Mr. Chester Lambert

SIVED OIL CONST DE L'ADRE tie in a

Martine 1949 Beating

#### STATE OF NEW MEXICO

## DEPARTMENT OF ENERGY AND MINERALS

#### OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF CO<sub>2</sub> IN ACTION FOR CREATION OF A NEW CARBON DIOXIDE GAS POOL AND SPECIAL POOL RULES, HARDING COUNTY, N.M.

Case 6750

#### APPLICATION

COMES NOW CO<sub>2</sub> IN ACTION, by and through its attorneys, Kellahin & Kellahin, and applies to the Oil Conservation Division of New Mexico for the creation of a new carbon dioxide gas pool and Special Pool Rules Harding County, New Mexico and would show the Division:

1. Applicant is an operator in the North Bueyeros-Santa Rosa CO<sub>2</sub> Gas Pool and requests that a carbon dioxide gas pool be created to include the following acreage:

Townership	20	North,	Range	30	East,	NMPM :

Sections	1:	A11
	2:	A11
	3:	A11
	4.	A11
	10.	N/2
	11:	N/2
	12:	N/2

Townership 21 North Range 30 East, NMPM;

Sections: 20 through 23: S/2

26 through 35: All

a to the second se 

2. Applicant requests the creation of said pool with 160 acre spacing and proration units but with a provision to allow for the drilling of additional wells within each said proration unit not to exceed a density of one well per 40 acre tract.

3. Applicant further seeks permission to locate wells so that no well is closer than 330 feet to any boundary of any quarter-quarter section.

4. That approval of the application is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that the matter be set for hearing and that after notice and hearing, the application be approved as requested.

CO<sub>2</sub> IN ACTION

Jadon Kellahin KELLAHIN & KELLAHIN P. O. Box 1769 Santa Fe, New Mexico 87501 Phone: (505) 982-4285

## STATE OF NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF CO2 IN ACTION FOR CREATION OF A NEW CARBON DIOXIDE GAS POOL AND SPECIAL POOL RULES, HARDING COUNTY, N.M.

Case 6750

### APPLICATION

COMES NOW CO<sub>2</sub> IN ACTION, by and through its attorneys, Kellahin & Kellahin, and applies to the Oil Conservation Division of New Mexico for the creation of a new carbon dioxide gas pool and Special Pool Rules Harding County, New Mexico and would show the Division:

1. Applicant is an operator in the North Bueyeros-Santa Rosa  $CO_2$  Gas Pool and requests that a carbon dioxide gas pool be created to include the following acreage:

Townership	20	North,	Range	30	East,	NMPM;

Sections 1: A11 2: A11 3: A11 4. A11 10. N/2 11: N/2 12: N/2

Townership 21 North Range 30 East, NMPM;

Sections: 20 through 23: S/2

26 through 35: All

THE SERVE. an an an Anna **(My** an <mark>1997).</mark> Tha an Anna Anna A**(My** an Angalana

and the second sec

2. Applicant requests the creation of said pool with 160 acre spacing and proration units but with a provision to allow for the drilling of additional wells within each said proration unit not to exceed a density of one well per 40 acre tract.

3. Applicant further seeks permission to locate wells so that no well is closer than 330 feet to any boundary of any quarter-quarter section.

4. That approval of the application is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that the matter be set for hearing and that after notice and hearing, the application be approved as requested.

CO<sub>2</sub> IN ACTION

Jadon Kellahin KELLAHIN & KELLAHIN P. O. Box 1769 Santa Fe, New Mexico 87501 Phone: (505) 982-4285

- 2 -

# STATE OF NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF CO2 IN ACTION FOR CREATION OF A NEW CARBON DIOXIDE GAS POOL AND SPECIAL POOL RULES, HARDING COUNTY, N.M.

Case 6750

#### APPLICATION

COMES NOW CO<sub>2</sub> IN ACTION, by and through its attorneys, Kellahin & Kellahin, and applies to the Oil Conservation Division of New Mexico for the creation of a new carbon dioxide gas pool and Special Pool Rules Harding County, New Mexico and would show the Division:

1. Applicant is an operator in the North Bueyeros-Santa Rosa  $CO_2$  Gas Pool and requests that a carbon dioxide gas pool be created to include the following acreage:

Townership 20 North, Range 30 East, NMPM;



Sections 1: A11 2: A11 3: A11 4. A11 10. N/2 11: N/2 12: N/2

Townership 21 North Range 30 East, NMPM;

Sections: 20 through 23: S/2

26 through 35: All

2. Applicant requests the creation of said pool with 160 acre spacing and proration units but with a provision to allow for the drilling of additional wells within each said proration unit not to exceed a density of one well per 40 acre tract.

3. Applicant further seeks permission to locate wells so that no well is closer than 330 feet to any boundary of any quarter-quarter section.

4. That approval of the application is in the best interest of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE, Applicant requests that the matter be set for hearing and that after notice and hearing, the application be approved as requested.

CO<sub>2</sub> IN ACTION

Jadon Kellahin KELLAHIN & KELLAHIN P. O. Box 1769 Santa Fe, New Mexico 87501 Phone: (505) 982-4285

A State of the second s

application of CO2-In-action due for post and special work for disting County, hew thegico. applicant in the acove styled Cause seeks the creation of the month Bulgeros - Santa Lora CO2 Dea Pool comprising all or parts of Altions 1, 2, 3, 10, 11, and 12, Township 20 houth, Lange 30 East and Sections 20 three 23 and 26 three 35, Township 2' Morth Range 30 East, applicant and Jules there for including a printion for Mo - acre spacing with the aption to drill on 40 and with well locations as close as 330 fast to the unit bandery.

		County,		
I ownihip		Townihip	Range	
Township	Range	Township	Renge	
		Form ICI-(Four on Township)	•	
			<u>:0</u>	
•• •• •• •• •• •• •• •• •• •• •• •• ••	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
-6δ	+	6666	┟─┶┥─┿─┧┝─┧─┼─┼─╆─╆	╶┋╌┿╼┥
┉╁╍┾╍┼╍┼╍┼	• • • • • • • • • • • • • • • • • • • •	<b>.</b>		
	10 11	7		-12
┥┽┥┥┥				
18			<u>╋╌┊╍</u> ┟╍┊╍┟╍┊╌┟╸┊┍┟╸┊╴	
•••••••••••••••••••••••••••••••••••••••				
19 20			21-22-23-23	21
	+			
-30		25	20 27 20	-25
	••••••		┨╍┋╍┠╍┋╍┠╍┋╍┠╍┋╍┠╍┋╍┠╍┋╸	
-3132		- 36	33-34-35-	36
		┟┼╷┥┿┥	┨╍╧┥╾╾╋╤╴╕╤╌┠╼╤╴2╼╤╌┠╼╤	
•••••••••••••••••••••••••••••••••••••••	•	╏╌┽╍┨╌┽╍┣╌┝╍┝╍╹╍┠╍╄╍╉╍┿━		
-78	9		9-10-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	12
╶┼╌┼╌┠╌┼╌┼		<b>┟┊┼┊╢╌┼╴┠┊╎</b> ╴	┨╌┋╾┠╍╌╸┨╶┊╸┨╶┊╸┨╶┊	
-18 17				
	· · · · · · · · · · · · · · · · · · ·			
+	┼┾┼┝┼╍┼╍┼┿┼	╉┽╋╡╢╧┾╧┨╧╎╧	╏╶┊╾╎╴┊╴╎╴┊╴┨╶┾╶┤╸┊╸┠╌┊	
-19	2122		21	-24
			<u></u> <u></u> <u></u> + + + - + - + - + - + - + - + - + - +	
30				-25
••[•••]••]••				
.31		36	33	36

ł

CO2 in lection Mus Case (nov 28)

ROUGII

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

ORDER OF THE DIVISION

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

6750 CASE NO. R-6230 Order No.

Application of CO<sub>2</sub>-In-Action, Inc. for creation of a new carbon dioxide gas pool and special pool rules, Harding County, New Mexico.

su

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on <u>November 28</u> 19<u>79</u>, at Santa Fe, New Mexico, before Examiner <u>R.L. Stamets</u> NOW, on this <u>day of <u>January</u>, 19<u>80</u>, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,</u>

#### 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, CO2 - In Action, Inc. seeks the creation of the

North Bueyeros-Santa Rosa CO2 Gas Pool comprising all or parts of Sections 1, 2, 3, 10, 11, and 12, Township 20 North, Range 30 East and Sections 20 thru 23 and 26 thru 35, Township 21 North, Range 30 East, and the promulgation of special rules therefor including a provision for 160-acre spacing units with the option to drill on 40 acres, and with well locations as close as 330 fect to the unit boundary. -2-Case No. 6750 Order No. R-

 (3) That the evidence presented in this case was insufficient to demonstrate that the proposed North Bueyeros-Santa Rosa CO<sub>2</sub> Gas Pool is a separate and distinct gas pool.

(4) That there are carbon dioxide gas wells and indications of carbon dioxide gas reservoir(s) outside the proposed pool which may be part of the same common source of supply.

(5) That the proposed North Bueyeros-Santa Rosa  $CO_2$  Gas Pool should not be created pending further study and the application for such creation should, therefore, be denied.

(6) That there is little available reservoir data on wells within and near the proposed pool upon which to base pool creation or to establish pool rules.

(7) That to provide for the collection of reservoir data including pressures, porosity, reservoir interference, well logs, samples, and other data the applicant should be permitted to drill one infill well within the SW/4 of Section 27, Township 21 North, Range 30 East, Harding County, New Mexico.

(9) That the applicant, prior to the drilling of said infill well, should confer with the supervisor of the Division's district office at Santa Fe to prepare a drilling, testing, and production program which will yield appropriate reservoir and reservoir drainage data.

(9) That approval of the application for infill drilling with the provisions set out above, should serve to develop *needed* reservoir data and should not cause waste nor violate correlative rights. -3-Case No. 6750 Order No. R-

### IT IS THEREFORE ORDERED:

(1) That the application of  $CO_2$ -In-Action, Inc. for the creation of the North Bueryeros-Santa Rosa  $CO_2$  Gas Pool in Harding County, New Mexico, is hereby denied.

(2) That the applicant is hereby authorized to drill an infill well within the SW/4 of Section 27, Township 21 North, Range 30 East, Harding County, New Mexico, for purposes of both production and development of reservoir data.

(3) That the applicant, prior to the drilling of said infill well, shall confer with the supervisor of the Division's district office at Santa Fe to prepare a drilling, testing, and production program which will yield appropriate reservoir and reservoir drainage data.

(4) That the applicant shall supply the Division with one copy of all well logs or other reservoir data developed through and trafting the drilling of said infill well.

(5) 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.