1	BEFORE THE OIL CONSERVATION COMMISSION
2	STATE OF NEW MEXICO
3	
4	IN RE: )
5	Aurora Gasoline Company's application )
6	for an order consolidating Lots 3 and 4 )
7	New Mexico, into a single proration unit )
8	of 51.95 acres, and special adjustment ) of allowable on said unit.
9	
10	·
11	TRANSCRIPT OF HEARING
12	December 20, 1951
13	
14	
15	(Mr. White reads the application.)
16	<u>G.</u> D. SIMON,
17	having been first duly sworn, testified as follows:
18	DIRECT EXAMINATION
19	By MR. ROSS MADOLE:
20	MR. MADOLE: I am Ross Madole, attorney appearing for
21	the Aurora Gasoline Company.
22	Q State your name please.
23	A G.D.Simon.
24	Q What is your occupation?
25	A Petroleum Engineer.

.

Have you previously testified before the Commission? 1 Q 2 A З 0 engineer were introduced 4 at that time? 5 Yes, sir. Α 6 Q On behalf of the Aurora Ga owner of the oil and gas lease on Loupany, who is the 7 Township 18S, Range 39E, NMPM, Lea Cou Section 29, 8 9 you tell the Commission as to the locat. ico, will 10 well? 11 Vis No. Yes, sir. The Aurora Gasoline Co. A 1 12 is located in Lea County New Mexico, -- do ) 13 No. 2? 14 No. 1. Q 15 Lea County New Mexico, 330 feet from th 16 A and 990 feet from the south line, Unit 0, Lot 4. 17 18 In what formation is that well completed? Q 19 That well is completed in the San Andres formation. A 20 What is the depth to which it is completed? 0 21 The Aurora Davis No. 1 is completed at a total depth A 22 of 4,465.feet. 23 Q The acreage to the west of that well is held by Gulf. 24 isn't it? 25 A That is correct.

Ì	
1	Q Have you previously testified before the Commission?
2	A I have.
3	Q And your qualifications as an engineer were introduced
4	at that time?
5	A Yes, sir.
6	Q On behalf of the Aurora Gasoline Company, who is the
7	owner of the oil and gas lease on Lots 3 and 4, Section 29,
8	Township 18S, Range 39E, NMPM, Lea County, New Mexico, will
9	you tell the Commission as to the location of your Davis No. 1
10	well?
11	A Yes, sir. The Aurora Gasoline Company Davis No. 1
12 13	is located in Lea County New Mexico, do you want No. 1 or
13	No. 2?
15	Q No. 1.
16	A Lea County New Mexico, 330 feet from the East line,
17	and 990 feet from the south line, Unit 0, Lot 4.
18	Q In what formation is that well completed?
19	A That well is completed in the San Andres formation.
20	Q What is the depth to which it is completed?
21	A The Aurora Davis No. 1 is completed at a total depth
22	of 4,465.feet.
23	Q The acreage to the west of that well is held by Gulf,
24	isn't it?
25	A That is correct.
<ul> <li>I and the second second</li></ul>	-2-

V

	l	Q Has there been a well completed in that formation to	
	ຂ	the west of your Davis No. 1 well?	
	з	A Yes, sir. That well being the Gulf R. D. Davis No. 1.	
V	4	Q Has there been a well completed by W. H. Black Drilling	1
	5	Company to the east over in Texas?	
	6	A Yes, sir, the W. H. Black Drilling Company recently	
V	7	completed the E. E. Jones "A" Well No. 3.	ł
	8	Q Is that well producing from the same formation?	
	9	A Yes, sir.	
	10	Q Do you know the allowable being run from that well	
	11		ł
	12	at the present time?	
	13	A No, sir, I do not.	ł
$\mathcal{V}$	14	Q Do they have an application before the Railroad	
	15	Commission of Texas for a discovery allowable, based on that	
	16	well?	
	17	A Yes, sir.	
	18	Q At the present time, what is the allowable being	
	19	produced from your Davis No. 1?	
	20	A The allowable for the Davis No. 1 at this time is	
	21	34 barrels per day.	
	22	Q If these two lots are combined for proration purposes,	
	23	do you think that the establishment of such a proration unit	
	24	will fully protect the correlative rights of this applicant	
	25	and adjacent land owners?	
			:

-3-

1	A	ł	I do.
2		5	And prevent waste?
3	A	ł	Yes, sir.
4		2	Also, is it not true that Skelly, to the south of
5	you,	Lot	4, has staked a location?
6	1	A	Yes, sir.
7		Q	For a well to this same formation?
8	1	A	Yes, sir, they have.
10	(	Q	How far south is it located from your south line of
11	Lot A	4?	
12		A	I believe it is 330 feet.
13	(	Q	Has Humble on the Texas side staked a location of a
14	diag	onal	offset to your Lot 4 to the southeast?
15		A	Yes, sir, I think they have.
16	1	Q	Also included in this application is an application
17	for	esta	unit blishment of a proration/for the Clearfork and known
18	as D	avis	No. 2 Well?
19		A	Yes, sir.
20		Q	Please state for the record the location of the
21	Davi	s No	. 2 well.
22		A	The Davis No. 2 well is located in S <sub>e</sub> ction 29, Range
23	39 E	•	
24		Q	18 South?
25		A	18 South.
	- - - -		-4-
1			•

1	Q	39 East.
2	A	It is 1980 feet from the south line, and 330 feet
З	from the	east line.
4	Q	To what formation has that well been drilled?
5	A	That well has been drilled to the Clearfork formation.
6	Q	Has that well been completed?
7	A	No, sir. It is now in the process of being completed.
8	Q	When completed, from what formation will it produce?
9	A	It will produce from the Clearfork formation.
10 11	Q	Are these separate and distinct sands from the San
11 12	Andres f	ormation?
12	A	Yes, sir.
14	Q	What is the total depth of that well?
15	A	That well is now bottomed at a TD of 6433.
16	Q	Are there any wells in that formation offsetting this
17	lot?	•
18	A	There are no direct offsets. However, it was drilled
19	for the	purpose of diagonally offsetting the W. H. Black-E. E.
20	Jones "A	" No. 2 and the W. H. Black-E. E. Jones "B" Well, No. 1.
21	Q	Is the Well No. L Black on the Texas side completed
22	in the C	learfork formation?
23	A	Yes, sir.
24	Q	How long has it been completed?
25	A	I don't know exactly. It has been on production for,
1		

-5-

ļ

1 I would say, almost a year.

1

2	Q In the event the two lots are combined for a proration
З	unit for the Clearfork formation, is it your opinion that the
4	establishment of such a proration unit will fully protect the
5	correlative rights of the Aurora Gasoline Company and the
6	adjacent land owners, and prevent waste?
7	A Yes, sir.
8	MR. MADOLE: I have no other questions.
10	MR. SPURRIER: Does anyone have a question of the witness?
10	MR. CAMPBELL: If the Commission please, I would like to
12	ask Mr. Simon a question or two.
13	CROSS EXAMINATION
14	By MR. CAMPBELL:
15	MR. CAMPBELL: My name is Jack M. Campbell of Roswell,
16	representing the Gulf Oil Corporation.
17	Q Mr. Simon, my questions will be directed toward that
18	portion of your application relating to the establishment of
19	a proration unit insofar as it applies to the San Andres
20	formation only.
21	A Yes, sir.
22	Q As I understand it, you are seeking an allowable of
23	51/40, combining Lots 3 and 4, based upon your San Andres
24	Well Davis No. 1, is that correct?
25	A Yes, sir.
	· · · · · · · · · · · · · · · · · · ·

-6-

1	Q In the course of drilling this Davis No. 2, of course
2	you went through the San Andres formation.
3	A That is correct.
4	Q Where does your where do you pick the top of the
5	San Andres in your No. 2 well?
6	A On the Davis No. 2?
7	Q Yes, sir.
8	A Ataminus 865.
9	Q And where did you pick the top in your No. 1?
10	A Ataminus 851.
12	Q Then you show the San Andres in your No. 2 to be
13	14 feet lower than your No. 1, is that correct?
14	A That is correct.
15	Q Could you state how much of your pay section you
16	have opened in your No. 1 well, do you know?
17	A Yes, sir, we feel we have approximately 20 feet.
18	Q Do you know where the water table may be, given in
19	your production from that well?
20	A Yes, sir. We feel that the well is bottomed very
21	close to the water table. We are taking that picture as being
22	the worse possible situation that could have developed. We
23	are now producing from the Davis No. 1 less than 1% water,
24	but there is a distinct percentage of water being produced
25	with that well. Consequently we feel we are very, very near,
	-7-

even perhaps just immediately above, the water table. 1 2 Now, on your No. 2 well, when you went through the 0 З San Andres, did you make any tests of that formation? 4 We did. Would you like me to go into that? Α 5 Yes. Would you state the nature of the tests and what Q 6 the results showed? 7 We took two so-called tests: one, we cored the А 8 formation, and secondly, we drill-stem tested the formation. 9 Let me give you the data on the drill-stem test. The drill 10 stem test consisted of an interval from minus 861 to minus 11 884 with the top of the porosity at a minus 065. The results 12 of the test were as follows: We recovered 720 feet of slightly 13 oil and gas cut salt water; and 1980 feet of sulphur water. 14 Our core analysis, as performed by Core Laboratories, Inc., 15 who do petroleum reservoir engineering work, submitted the 16 following report on the Davis No. 2: I will read directly 17 from this and submit it as an exhibit. 18 19 Formation occurring between the depth 4450 and 4460 20 contained very low permeability, and is not expected to produce 21 appreciable quantities. One foot of the formation in the 22 interval is permeable and occurs at the depth 4458 to 4459; 23 Fluid properties measured in this foot of formation indicate 24 gas production. The formation from 4460 to 4477 feet contains 2E appreciable permeability and sizeable fluid properties. These

-8-

1	fluid properties indicate oil production to the depth 4470
2	feet. Formations between 4470 and 4477 feet contain a semewhat
3	higher water saturation, which might indicate this zone to be
4	in a transitional state from oil to water production.
5	· Q Based on the results of your drill stem test in which
6	you recovered 720 feet of oil and gas cut salt water and 1980
7	feet of sulphur water, would you consider the San Andres
8	formation in your Davis No. 2 to be a commercial oil well?
9	A I do, and I would like to inject some other information
11	into the
12	Q Go ahead.
13	A into the situation here. I would like to make
14	direct reference to the W. H. Black-Jones "A" 3. The top
15	of the porosity in that well was found at -860. The TD -864,
16	leaving a net of 4 feet of pay from which that well is now
17	producing. That well, on potential test, produced in the
18	neighborhood of ten barrels per hour. Going back to the
19	Aurora Davis No. 2, as I stated before, the top of the porosity
20	was -865. Comparing the TD in the Jones A-3 and the Aurora
21	Davis No. 2, it can be seen that the Jones A-3 is bottomed
22	one foot above the porosity in the Aurora Davis No. 2. I would
23	like to bring out the fact that the Jones A-3 did not make any
24	water during its potential test, and to date is still not making
25	any water. Jumping over to our core analysis, it is quite
	-9-

1 indicative that the entire San Andres formation in the area 2 is extremely permeable and very highly porous. And the core З analysis as taken on the W. H. Black-Jones A-3, entirely bears 4 The core analysis on the Jone A-3 further that fact out. 5 indicates that vertical fracturing is present. Accordingly. 6 we feel that if vertical fracturing is present in the Jones A-3, 7 which is bottomed one foot above the porosity in the Aurora 8 Davis No. 2, that at the rate of at least 10 berrels an hour 9 there would have been some water produced. 10

Lets go back to the water table as we have picked it in 11 the worse situation relative to the Aurora Gasoline Company, 12 which is at -871. We are 6 feet above the water table in the 13 Aurora Davis No. 2. Now, if the Black-Jones A-3 is producing 14 at a rate of 10 barrels an hour from 4 feet of pay, I don't 1516 think it is unreasonable to believe that a producer could not be made out of the Aurora Davis No. 2 6 feet above the 17 18 water table, and which is only one foot with respect to the 19 porosity above the total depth in the Jones A-3. I personally 20 supervised the coring and the drill stem testing on the Aurora 21 Davis No. 2, and had the opportunity to inspect the cores 22 as taken on the Gulf Davis No. 1, and the Black-Jones A-3. 23 And from what I could detect from looking at the cores under 24 a microscope, all three cores contain the same type of formation 25 and the same type of porosity, which was both oolitic and

-10-

1	granular, and there is no doubt in my mind those are the
2	same formation, San Andres.
3	Q Despite that, Mr. Simon, it is correct, isn't it, the
4	test you made in that formation did not indicate any otl
5	production. There was no oil recovered, was there?
6	A The salt water was cut with oil and gas.
7	Q The Jones No. 3 Well you are referring to is the one which
9	offsets the Davis No. 1 producer to the south of the No. 2
10	well?
11	A That is correct.
12	Q Do you feel that the would you recommend to your
13	company they complete the No. 2 well in the San Andres?
14	A Would I recommend it at this time? I can't very well do
15	that for the simple reason that the original intention of
16	that well was to meet a Clearfork obligation, and not for
17	a San Andres test. I would like to go on to further state
18	that the chief purpose of drill stem testing and coring the
19	San Andres section was for the determination of the water
20	table. We know definitely we are producing some water in the
21	Aurora Davis No. 1.
22	MR. CAMPBELL: I think that's all.
23	
24	
25	
	_11-

-		
1	REDIRECT EXAMINATION	
2	By MR. MADOLE:	
3	Q Mr. Simon, the drill stem test made was made below	
4	the water line that you knew at the time, wasn't it?	
5	A That is correct.	
6	Q The Davis No. 2 well, I think you mentioned, was	
7	drilled to comply with a drilling obligation in the assignment	
8	to Aurora, wasn't that true?	
9 10	A That is correct.	
11	Q And the test in the No. 2 well as to the San Andres	
12	was for the purpose of determining the water table?	
13	A That is correct.	
14	Q As my figures I am not an engineer but the test	
15	drill stem test, was run from 4454 to 4477, wasn't it?	
16	A That is correct.	
17	Q 27 feet.	
18	A Yes, sir.	
19	Q And assuming you how far below the water line	
20	was that test made?	
21	A Direct reference is again made to the Core Lab's	
22	report where they state that the formation between 4470 and	
23	4477 contains a somewhat higher water saturation in the above	
24	interval that was cored. And this may indicate that the zone	
25	to be in a transitional state from oil to water production.	

-12-

1	Q Mr. Simon, have you been testing for the purpose of
2	completing a well in the San Andres, the drill stem test
З	would have been conducted otherwise than with 27 feet of
4	testing wouldn't it?
5	A I want to state it definitely would. In fact, we
6	would have no doubt employed the same type of
7 8	completion program that the Gulf Oil Corporation and the
9	W. H. Black Drilling Company employed, and they cored very
10	small intervals, as much as two or three feet at a time.
11	For the very simple reason that they very definitely wanted
12	to stay high enough above the water table.
13	MR. MADOLE: I have no further questions.
14	RECROSS EXAMINATION
14 15	RECROSS EXAMINATION BY MR. CAMPBELL:
15	BY MR. CAMPBELL:
15 16	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon.
15 16 17	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the
15 16 17 18	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table?
15 16 17 18 19	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table? A No, sir.
15 16 17 18 19 20	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table? A No, sir. Q A portion was below your estimate of the water table.
15 16 17 18 19 20 21	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table? A No, sir. Q A portion was below your estimate of the water table. A Yes, sir.
15 16 17 18 19 20 21 22	BY <u>MR. CAMPBELL</u> : Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table? A No, sir. Q A portion was below your estimate of the water table. A Yes, sir. Q And a portion up in the same zone now producing on
15 16 17 18 19 20 21 22 23	<pre>BY MR. CAMPBELL: Q I am not sure I understood one or two answers, Mr. Simon. You didn't state the drill stem test was entirely below the water table? A No, sir. Q A portion was below your estimate of the water table. A Yes, sir. Q And a portion up in the same zone now producing on your Davis No. 1?</pre>

-13-

 $\mathbf{\dot{e}}$ 

1	MR. SPURRIER: Anyone else have a question of this
2	witness?
2 3	MR. WHITE: I have one question here.
4	By <u>MR</u> . <u>WHITE</u> :
5	Q Take your three lots and you are asking us to extend
6	the lot on the east to include the one immediately to the west -
7	MR. MADOLE: No, they run north and south, Lots 3 and 4
8	(Off the record)
9	MR. MADOLE: As our Exhibit No. 1, we would like to
10	introduce the contour map from which the witness testified.
11	MR. SPURRIER: Without objection it would be received.
12	MR. MADOLE: As Exhibit No. 2 we would like to introduce
	the location of the Aurora Gasoline Company's Davis No. 1 well.
13	As our Exhibit No. 3 we would like to introduce the location
14	of the Aurora Gasoline Company's Davis No. 2 well. As our
15	Exhibit No. 4 we would like to introduce the location of the
16	Gulf Davis No. 1 well. As our Exhibit No. 5 we would like to
17	introduce the location of the A-3 Black-Jones well in Texas.
18	As our Exhibit 6 we would like to introduce the drill stem
19	testing data on the Davis No. 2 Aurora. As our Exhibit No. 7
20	we would like to introduce the core analysis of the Aurora
	Gasoline No. 2 Davis well. As our Exhibit No. 8 we would like
21	to introduce the core analysis on the Black-Jones A-3 well.
22	MR. SPURRIER: Without objection these Exhibits will
23	be received, 2 through 8.
24	-14-
25	

•

l	R. L. BOSS,
2	having been first duly sworn, testified as follows:
3	DIRECT EXAMINATION
. 4	BY MR. CAMPBELL:
5	Q Will you state your name and the company by whom
6	you are employed?
7	A R. L. Boss, employed as zone geologist by the Gulf
8	Oil Corporation.
9	Q Have you testified previously before this Commission?
10	A I have.
11	MR. CAMPBELL: Is the Commission satisfied with the
12	qualifications of the witness?
13	MR. SPURRIER: They are.
14	Q Mr. Boss, are you acquainted with recent discoveries
15	that have been made in Section 29, Township 18S, Range 39E,
16	Lea County, New Mexico?
17	A Iam.
18	Q What is Gulf's interest in that immediate area?
19	A Gulf has several tracts in the immediate area. One,
20	comprising the southwest quarter of Section 29, Township 188,
21	Range 39E, NMPM, which - on which - we have completed a well
22	quite recently to the San Andres pay.
23	Q That is immediately west of the Aurora Company's Davis
24	
25	A That is true.
	-15-

1	Q I hand you what has been marked Gulf Exhibit No. 1.
2	I will ask you to state what that is.
3	A That is our interpretation of the San Andres
4	structure in that immediate area. At least on the evidence
5	from the electrical logs and well samples.
6	Q What does that map show with respect to the
7	structural position of the Davis No. 2 well of the Aurora
8	Gasoline Company?
9	A It merely shows the relative structure position
10	between the several wells in the area.
11	Q What is the relative position as shown by your
12	interpretation upon the Davis No. 1 well and the Davis No. 2
13	well?
14	A Well according to our determination of the San Andres
15	datum formation of these wells, which has been based on both
16	electrical logs and schlumber jays, but corrected to the -
17	to the electrical log, rather - our interpretation is that the
18	No. 2 Davis well, Aurora Davis, is 18 feet low to the No. 1:
19	That is, on the top of the San Andres formation.
20	Q Are you acquainted with tests that have been taken
21	and reports that have been made with reference to those tests
22	on the Aurora Davis No. 2 well?
23	A I sm.
24	Q Will you just state to the Commission what your
25	understanding of the test and the results is and what your
ł	

-16-

1 conclusion is based on that information.

2 The record we obtained of those tests on the Aurora Davis No. 2 was identical with that reported by Mr. Simon. З 4 And our interpretation of those - of these data - is that since 5 the test included the top of the San Andres and an additional 6 section of some 23 feet, that all or any part of what might 7 have been commercially productive was included in that test, 8 and the results of the test in our opinion do not indicate 9 that this particular well would be a commercial well from the 10 San Andres pay. The small amount of oil that was obtained 11 despite the fact that there was some oil, it was negligible 12 apparently, and a well 90 feet from our No. 1 well which is 13 quite prolific from this pay, it would be our interpretation 14 there would be more oil recovery in addition to the water if 15 the San Andres were commercially productive in this location. 16 In other words it is your conclusion from the Q 17 information you have, based on these tests taken by the Aurora 18 Gasoline Company, that the test doesn't indicate that the 19 Davis No. 2 would be an oil well in the San Andres, is that 20 correct? 21A That is our interpretation. I notice on Gulf's Exhibit 1 there is a line, east-22 Q

24 you state to the Commission the purpose of that line?

23

25

west line, drawn through the Davis No. 2 well in Lot 3. Will

A The indicated dip on that portion of the structure is

-17-

1	north. Therefore it is conceivable that a portion of that
. 2	acreage is underlain by oil in the San Andres formation. And
з	that portion would be the up dip or the southern part of the
4	lot. By drawing a line, east-west line, through well No. 2
5	would divide the Lot No. 3 in two almost identical portions.
6	According to our information on that survey in the area, the
7	information given is the southern portion of Lot 3,12.95 acres,
8	northern part 13.01 acres. Since the oil would be up dip, the
9	12.95 acres conceivably could contain some oil. In that
10	consequence Gulf's position is that by uniting that portion of
11	Lot 3 with the 25.99 acres in Lot 4, it would approach 39 acres-
12	38.94 acres to be exact - which is very close to the basic 40
13	acre unit. And on that reasoning gulf would have no objection
14	to the Aurora obtaining the basic 40 acre allowable on their
15	well.
16	Q In other words, Gulf is not seeking as a result of
17	our interpretation of this Davis No. 2 well to restrict Davis
18	No. 1 to 25/40 allowable?
19	A No.
20	Q You would be willing to concede the possibility of
21	production in the southern part of Lot 3, and wouldn't object
22	to a normal 40 acre unit allowable for the Davis No. 1 well in
23	the San Andres?
24	A That is correct.
25	MR. CAMPBELL: I believe that's all.
	-18-

.

1	CROSS EXAMINATION
2	BY MR. MADOLE:
3	Q Mr. Boss, your interpretation - did you have the
4	benefit of the core analysis of the Core Laboratories at the
5	time you made your interpretations?
6	A No, sir.
7	Q Isn't it true then that - and you don't question
8	those core analysis in any way?
9	A No, sir.
10	Q Isn't it true that the method of the test which was
11	made - strike that please. There is a definite water drive
12	in this formation isn't there? There is a water drive?
13	A Well the preliminary data suggests that.
14	Q A water drive. If the test was made below the water
15	line, as was indicated and testified to, isn't it very possible
16	that you would draw your salt water out in such a way it would
17	drown out your oil in that sand where you made the test of that
18	character? In other words, being below the water line at that
19	point and if you made a 27 foot test you could very easily
20	pull your water in shead of your oil so that it wouldn't be a
21	true test of your oil content?
22	A It possibly would not be a true test. However, I
23	think it would be a very suggestive. And under the conditions
24	of this particular well I cannot help but feel that more oil
25	would have been recovered from this test had there been any
	-19-

1	oil there.
2	Q But you are not testifying that there possibly is
3	more oil there?
4	A No.
5	MR. MADOLE: That's all.
6	MR. SPURRIER: As evidenced by the trace of oil in the
7	recovery.
8	REDIRECT EXAMINATION
9	By MR. CAMPBELL:
10	Q Mr. Eoss, your position is simply based on the
11	information provided by tests taken by Aurora themselves.
12	There isn't sufficient evidence of production from that well
13	to justify attributing to it acreage for the basis of an
14	additional allowable?
15	A That is true. The down dip portion of the lot would
16	certainly be below the water table, and thereby I think the
17	test has condemned at least that portion of Lot 3. We will
18	concede there is oil under the remaining or up dip portion.
19	And with that and the 25 acres in Lot 4 approaching the unit,
20	it is our idea that that would be a more equitable allowable
21	than based on 51 and a fraction acres.
22	RECROSS EXAMINATION
23	By MR. MADOLE:
24	Q Mr. Boss, did you have the benefit of the sore
25	analysis in the A-3 Jones-Black well when you made your
	-20-

1	interpretation?
ខ	A No, sir.
З	Q You didn't have that?
4	A No, sir.
5	Q Then you have no reason to question the information
6	testified to by Mr. Simon as to the depth and footage that
7	they are producing from?
8	A No, sir.
9	Q Would that effect your interpretation?
10	A I think not.
11	Q If the core analysis indicate they are producing
12	from between 4 and 5 feet of sand lime above the water table
13	and the core analysis show that the Davis No. 2 well has in
14	excess of 6 feet, isn't there a very good possibility that a
15	well could be completed in the Davis No. 2 well?
16	A Core analysis are not complete indications of the
17	performance of the reservoir. They are a close approach, one
18	of our best methods, but the performance of reservoirs
19	sometimes, quite frequently, doesn't follow the evidence that
20	core analysis gives. In other words, if you had a core analysis
21	and from that would make an estimate of the recoverable fluids
22	from the reservoir, the actual well performance doesn't follow
23	that exactly.
24	Q Those findings could not be disregarded in your
25	interpretation though, could they?

-21-

1	A They would have to be considered as evidence.
2	MR. MADOLE: That's all.
3	MR. WHITE: I would like to ask Mr. Simon a question.
4	(Mr. Simon resume the stand)
5	By MR. WHITE:
6	Q If we assume your analysis is correct and there is
7	oil in that particular formation in the No. 2 well, what
8	reason can you offer as to why the Commission should give you
9	more than a normal 40 acre unit allowable on No. 1?
10	A Would you please state the question again?
11	MR. WHITE: Will you read it, please?
12	(Reporter reads the question.)
13	MR. MADOLE: Is that engineering question or law question?
14	MR. WHITE: If we even assume there is oil in the formation
15	in the No. 2 well and you are not producing from that formation
16	in the No. 2, what you are asking for is to give you more than
17	a 40 acre normal al lowable on your No. 1.
18	MR. MADOLE: You have 52/40 acres. Our proration in New
19	Mexico is on a flat acreage basis. And also your statute
20	provides that you will not drill unnecessary wells. Therefore
21	from your question you would make it necessary to drill an
22	additional well on Lot 3 when the correlative rights could be
23	protected on a straight acreage basis.
24	MR. WHITE: That's all I have.
25	MR. SPURRIER: Would Aurora consider making more tests on

-22-

h

<sup>1</sup> this particular producing formation in that No. 2 Davis?

MR. MADOLE: I am not an engineer. I don't know what we would be glad to do anything the Commission wants. We are
not adverse to doing anything you would suggest.

MR. SPURRIER: The Commission is faced with two divergent
opinions on the same amount of testing and it is up to the
Commission to decide whether you get 40 or 52. One allowable
or 52/40 of an allowable.

9 MR. SIMON: Mr. Spurrier, would you please state what type 10 of test you had reference to?

MR. SPURRIER: If you are willing to make any further
test, what you make is up to you.

MR. SIMON: It would be impossible to test the Davis No. 2
<sup>13</sup> MR. SIMON: It would be impossible to test the Davis No. 2
<sup>14</sup> because the formation has been cased off and we are now attempt<sup>15</sup> ing to produce from the Clearfork, and the only other method
<sup>16</sup> which could be employed would be the drilling of another well.
<sup>17</sup> MR. SPURRIER: Does anyone have a further question of
<sup>18</sup> either witness?

MR. BLYMN: Mr. Chairman, I would like to make a statement and possibly lead to a question. Inasmuch as the Davis No. 1 is 330 feet from Texas it appears there is a chance for correlative rights to be affected across the State line. If I might I would like to ask of the Aurora if the property owners and the Texas Railroad Commission have been informed of their application pending before this Commission now?

-23-

1	MR. MADOLE: Mr. Blymn, they were included as adjacent
ຂ	owners in the application and whether or not the Commission
З	gave notice I wouldn't want to state. But they were named
4	and set up in the application that they were the adjacent
5	owners on the Texas side.
6	MR. BLYMN: The Railroad Commission has been informed of
7	this application.
8	MR. MADOLE: The notice is to be given by the Commission.
9	I do not know what notice they gave.
10	MR. BLYMN: Thank you.
11	MR. MADOLE: For the record I would like to state - it
12	isn't testimony, it is hearsay - but Black has no objections
13	whatsoever to this application, and they have so stated to
14	Aurora.
15	MR. CAMPBELL: What kind of allowable is Black getting?
16	MR. MADOLE: A discovery allowable of about 75 barrels a
17	day from my understanding, and on which they have a hearing on
18	January the 4th.
19	MR. SPURRIER: What allowable are you asking for here,
20	what figure?
21	MR. MADOLE: Figure about 68 sir. The 25/40 figures 34.
22	It would be approximately 68. I was going to make a statement
23	to the Commission with reference to the very thing Mr. Blymn
24	brought out after we finished the testimony. This is certainly
<b>2</b> 5	one of those cases that should be considered in this joint
25	one of those cases that should be considered in this joint -24-

1	Reilroad Commission and New Mexico Oil Conservation Commission	
[	hearing which has been suggested. Because if that well is	
з	allowed a discovery allowable for several months, and this well	
4	- for that well is only 330 feet from the line, or 660 feet-	
Б	and then we are cut to a 34 barrel allowable, we are certainly	
6	going to be drained.	
7	MR. SPURRIER: How far is your well from the -	
8	MR. MADOLE: 330.	
9	MR. SPURRIER: Are there any further questions?	
10	MR. CAMPBELL: How were you computing the 34 barrels, on	
11	the 25/40 basis?	
12	A . Yes, sir.	
13	MR. CAMPBELL: I might say in the light of what he has	
14	said it becomes apparent that the Black well in Texas may be	
15	allowed to produce a discovery allowable of 70 some odd barrels	
16	and if this well were granted a 52/40 allowable, then the Gulf	
17	well to the west of that is going to have a normal 40 acre unit	
18	allowable; it seems to me quite obvious that the production to	
19	the east of the Gulf well on the Texas State line is going to	
20	accessively affect the correlative rights of owners of leases	
21	to the west. I would like also to state Gulf has no objection	
22	to the unitization of these lots for the purpose of establishing	
23	allowables in excess of basic unit allowables where the	
24	circumstances show that both of the lots would be fully	
25	productive. The best that can be said of the evidence in this	
	-25-	

``

.

1	case is that it is extremely speculative, and the interpreta-
2	tion that Gulf places on it is had there been any oil there in
3	appreciable quantities it would have developed during the
4	course of the drilling test. I would like also to repeat to
5	the Commission, Gulf has no objection to including the lower
6	part of Lot 3 as a proration unit with the Davis No. 1 well
7	and giving it a normal 40 acre unit allowable. We are not
8	insisting that they be limited to 34 barrels or a $25/40$
9	allowable as they seem to apprehensive about.
10	MR. SPURRIER: Mr. Madole.
11	MR. MADOLE: I have no further comment to make except to
12	point out to the Commission the circumstances under which this
13	test was made in the San Andres formation. This Commission
14	is acquainted with the history of the Aurora Gasoline Company's
15	operations and the necessity of the Clearfork drilling
16	obligation. As pointed out by the witness, had there - had
17	they been interested in completing the well in the San Andres
18	an entirely different procedure would have been used. Further-
19	more, the test that was made was conducive entirely to bringing
20	salt water to the surface, but the core analysis as introduced
21	in the Commission hearing indicate an oil content and there is
22	nothing that has been introduced to discount the fact that that
23	formation could produce oil. The Cooper-Jal and others are
24	producing with less than 5% oil content and making their
25	allowable. So we can't, on the basis of this evidence, see
	-26-

1	that there is no oil underlying the Davis No. 2 well. And
ຂ	with those circumstances we say that the full allowable should
3	be granted. Should subsequent test by Gulf or otherwise
4	indicate that she was barren further north, we can reconsider
5	the matter at that time. We certainly don't want anymore than
6	we are entitled to. But we want whatever is reasonable under
7	the circumstances. We realize there is a negative condition
8	with the production to the east and the fact that the Clearfork
9	had to be tested in the Davis No. 2 well; and for that reason,
10	we do not want to appear before the Commission as in any way
11	wanting something for nothing and including acreage that is
12	barren. But at the same time this - and also I would like to
13	point out to the Commission that this application was made
14	prior to the time of the testing of the Davis No. 2 and we
15	feel that the showing made here is it will produce from the
16	Davis No. 2 and in that formation, but for business reasons
17	it wasn't used as a basis of making a well in the San Andres
18	formation.
19	MR. SPURRIER: Does Gulf contemplate an offset to the
20	west?
21	MR. BOSS: Not as yet.
22	MR. SPURRIER: Wasn't this San Andres production discovered
23	on the New Mexico side by your Aurora No. 1?
24	MR. MADOLE: Yes, sir.
25	MR. SPURRIER: And now Mr. Black is getting a discovery
	-27-

1 allowable on the Texas side?

2 MR. MADOLE: There is a hearing set for January the 4th 3 before the Railroad Commission of Texas.

4 MR. SPURRIER: And what will they decide at that time, 5 what problems do they have?

MR. MADOLE: The question of granting the discovery
allowable to the Black A-3 well from the San Andres formation. electric
In other words we are now up to the /.log on the very problem
we discussed at the joint hearing of the Railroad Commission
and the Oil Conservation Commission.

11 (Off the record discussion)

12 I think in the interest of interstate MR. SPURRIER: 13 cooperation, which we feel can be accomplished with Texas, and 14 in the interest of equity, that the Commission will continue 15 this case to its regular January hearing, which I believe will 16 be set for January 22. And we will in the meantime consult 17 Texas and probably so write our advertisements that we will have some type of joint action. It is obvious there are 18 differences here that should be resolved. 19

20 MR. MADOLE: In the interim are we limited to 25/40? 21 MR. SPURRIER: In the interim I would say that you will 22 probably be regulated to the 40 acre figure.

23 MR. MADOLE: That is agreeable to us, sir, until such
24 time as it can be worked out.

25 MR. SPURRIER: Does Gulf have objection? Any further comments on the case? That concludes the hearing.

-28-

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

I HEREBY CERTIFY That the attached transcript of hearing in Case No. 332 is a true record of the same to the best of my knowledge, skill, and ability.

DONE at Albuquerque, N. M., January 23, 1952.

S.S

G. G. Jacem E. Greeson Ε.

Notary Public

My Commission Expires: 8-4-52

OIL CONSERVATION COMMISSION

1

-.

ţ

-

STATE OF NEW MEXICO

• ~

\*\*\*\*\*

Transcript of Mearing

CASE NO. 332

\*\*\*\*\*

January 22, 1952

Menrickson's Reporting Service 2324 - 47th Street Los Alamos, New Mexico

,

## BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

January 22, 1952

Case No. 332: In the matter of the application of the Amrora Gasoline Company for an order consolidating Lots 3 and 4 in Section 29, Township 18 South, Range 39 East, NMPM, Lea County, New Mexico into one proration unit of 51.95 acres, and special adjustment of allowable on said unit.

MR. SPURRIER: If there are no objections, the record will show that the advertisement has been read in full. I'm sorry for the delay, gentlemen. It seems like this is the slowest day we've ever had. In Case 332, you will remember, we continued that case to this hearing to get some information from the Texas side of this pool. Now, Mr. Singletary has come up from Austin to listen in and if there is information which is not available to the New Mexico people, perhaps Mr. Singletary can help us out. We are not putting him on the witness stand but we want everyone to know that the Texas Commission has sent him up here to help us work out the problem we have on this pool. Now, Mr. Madole, do you have anything further?

MR. MADOLE: I have no further questions of him. I think this matter is for the higher echelons to work out between Texas and New Mexico.

-1-

MR. SPURRIER: Now, we have at the moment a proration letter and allowable based on forty (40) acres. Don't you have some comment on that, Mr. Madole?

MR. MADOLE: The Aurora Gasoline Company's case in chief was placed in the record at the previous hearing and we still insist on 51.95 allowable at such time as the Commission determines this case.

MR. SPURRIER: For what well and what formation?

MR. MADOLE: We wish to formally withdraw our application as to the Clearfork Formation and confine the application entirely to the San Andres Formation and that would be Lots 3 and 4 on which there is one well, the Davis No. 1, located on Lot 4, Township 18 South, 39 East, Section 29.

MR. CAMPBELL: Commissioner?

MR. SPUREIER: Yes, sir.

MR. CAMPBELL: Jack Campbell representing Gulf Oil Corporation. We would like to reiterate our position established by the evidence at the January hearing. And in the opinion of Gulf, the results of tests in the San Andres and Davis Well No. 2 of the Aurora Gasoline Company established that that formation was not productive at the location of that well and that the acreage to the north of the Davis No. 2 well has been condemned insofar as the San Andres production is concerned. We wish to also reiterate that we have no objection

-2-

to the continuation of a normal forty (40) acre unit allowable in view of the fact that the acreage in the south lot, combined with the acreage to the south of the well location in the northern let, together approximate forty (40) acres. And for that reason, the Davis No. 1 well should be allowed a normal fifty-one (51) barrel allowable. We understand that there is, at present, being allocated to a well er wells in Texas producing from the same formation immediately across the State Line, a temporary allowable of one hundred (100) barrels per day. Approximately twice the allowable in New Mexico and we suggest as soon as feasible, an effort be made to reconcile the production - - the allowable between the Texas and New Mexico wells to avoid drainage from the New Mexico to the Texas side of the State Line.

MR. MADOLE: May it please the Commissioners, in view of the fact that we are re-arguing the case, I wish to state for the record that Mr. Campbell's conception of the evidence introduced is very much opposed to my conclusion of the evidence introduced at the last hearing. The evidence did not show that the Let 3 was non-productive. The evidence introduced by the Autora conclusively proved that there was more than six feet of productive sand found in the drillstem test in the core and the core analysis on the Davis No. 2 well. It was also undisputed and uncontradicted in the testimony and in the documentary proof that the Black Well on the Texas side is producing with four feet of formation and making no formation water.

-3-

It is producing from a minus 861. The Davis No. 2 well showed the production area at 865. The total depth of the Davis - - of the Black Well was at a minus 864. There was no formation water. There was a vertical fracture. If that formation in the Davis No. 2 was present for an oil-bearing sand, it would have shown - - and was drowned out by water, it would have shown to have been drewned out and would be making water in the Black Well. Furthermore, for the record and the Commission, we wish to state that as testified to by the geologist and engineer - excuse me, the engineer rather than the geologist for Anrora, the drill-stem test that was made was not for the purpose of coring or testing for the making of a well in the San Andres. For the record, as is well known by the Commission, the No. 2 Davis was drilled to comply with a drilling obligation which must go to the Clearfork and the San Andres formation was found in the Davis No. 1 well. They completed it as a well - she blew out - and they still had to go in and drill the Davis No. 2 well to comply with the drilling obligation. They were not interested in making a well in the Davis No. 2 in the San Andres - - entirely different drilling and testing procedures would have been carried out. To confiscate twelve (12) acres of land on the basis of the suspicion by Gulf that they didn't find oil without any proof other than the proof that they had in their well, Mr. Toss testified that his interpretation was based entirely upon what he found in his well,

-4-

on the Gulf well, and on the recorded information on the Davis No. 1 well that he did not have the benefit of the core analysis on the Black Well and that he could not disregard them in any interpretation. So to reach the bald-faced conclusion that we have proved a dry hole in the Davis No. 2 well in the San Andres formation doesn't conform to the facts or the proof in this case.

MR. CAMPBELL: If the Commission please, the record is available to the Commission and we will rely on Mr. Foss' bald-faced conclusion.

MR. SPURRIER: Thank you. Does anyone have any further comment in Case No. 332? If not, the case will be taken under advisement and I believe that the Commission - this Commission will have to consult with the Texas Commission before we can reach a clearcut conclusion.

\_ \_ \_ \_ \_ \_ \_ \_

88

STATE OF NEW MEXICO ) ) COUNTY OF LOS ALAMOS)

I hereby certify that the foregoing and attached transcript of hearing in Case 332 before the Oil Conservation Commission on January 22, 1952, at Santa Fe is a true record of the same to the best of my knowledge, skill and ability.

DATED at Los Alamos, this 23rd day of January, 1952.

Andrey M. Henrickson

My commission supires September 20, 1955.

-5-