CASE 4887: Appli. of Geolectric, INC. FOR DOWNHOLE COMMINGLING. SAN JUAN COUNTY, NEW MEXICO. -ase Number

Application
Transcripts.

Small Exhibits

	PAGE 3		
. 1	MR. NUTTER: Call the next case, 4887.		
2	MR. CARR: 4887, application of GeoLectric,		
3	Incorporated for downhole commingling, San Juan County, New		
4	Mexico.		
5	BRADLEY H. KEISS,		
6	a witness, having been first duly sworn according to law, upon		
7	his oath, testified as follows:		
8	DIRECT EXAMINATION		
ુ 9	BY MR. NUTTER:		
10	Q Would you state your name, please?		
11	A Bradley H. Keiss.		
12	Q Mr. Keiss, are you a representative of GeoLectric,		
13	Incorporated in this case?		
14	A Yes, sir. I am.		
15	Q Is GeoLectric Incorporated the owner of the subject well?		
16	A It is not the owner of the subject well. No, it is the		
17	operator.		
18	Q You are appearing as the operator and the agent for the		
19	owner of the well, then?		
20	A Yes, sir.		
21	Q Now, what did you propose in this case, Mr. Keiss?		
22	A I proposed to, this well is a dual completion and has a		
23	packer, and I propose to remove the packer and produce		
24	both zones through the Pictured Cliffs. I have 2-inch		
25	tubing in the Pictured Cliffs, and I am presently		

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No, sir.

PAGE
producing through 7-inch casing. I have no tubing string
in there and I do not feel that producing it through the
tubing will increase production and also the life of the
well because there is quite a bit of water in that
formation.
The Fruitland produces quite a bit of water?
Yes.
You do have a production problem, then, producing the
Fruitland through the annulus?
Yes.
Now, what is the potential for the two zones respectivel
Mr. Keiss?
You want that by the, well, 1971 the Pictured Cliffs
produced 7,000,958 cubic feet; and the Fruitland
produced 2,000,743 cubic feet for the whole year.
So in other words, the Pictured Cliffs is about three
times as good as the Fruitland then; is that correct?
Yes, sir.
How about pressures in these two zones, Mr. Keiss?
The bottomhole pressures in the Fruitland run 169.9 and
in the Pictured Cliffs, 172.4.
So there is no substantial difference in the pressure
the two formations?

Is the Pictured Cliffs dry production or does it produce

	1 [		considerable water, also?	
•	2	A	It has produced considerable water.	
		Q	so the tubing is necessary for it?	•
 	4	A	Yes.  Now, the Aztec-Pictured Cliffs is a prorated pool, while	
	5	Q	Now, the Aztec-Pictured Clills 15 to the Now, the Aztec-Fruitland is not a prorated pool. What is the	: 
	6		the Aztec-Fruitland is not a product of the Ransom Well Number 1 as far as proration is	
1	8		concerned?	4 4
	9	A	They have both been exempted.	
	10	Q	They are marginal wells?	
	11	A	Yes, and have been since almost original production.  Yes, and have been since almost original production.  I see. Now, how would you propose to allocate the	
. 601	12	Q	I see. Now, how would you put	
EXICO 87103	13	<b>3</b>	ingling was approved?	
M X 4 X 4 X 4 X 4 X 4 X 4 X 4 X 4 X 4 X	1	4	downhole comminging and downhole comminging and leading the basis of lf approved, I could probably run that on the basis of	
2 C C F F F F F F F F F F F F F F F F F	. 1	5 1	and the control of th	
80000E		16	3 to 1.  Q Is this 3 to 1 on the historic proportion?	
S BLDG P.O. BOX 1092 . PHONE 243-6601 . ALBUAU			and the second control of the second control	ŀ
1€ 243-6 EAST	(	18	historic proportion of is that	
40H9.8	χ α Γ ο	20	Q Is this 3 to 1 a mistrage of the light of Is a light of	
801 X O ff	AL BAN	21	on 1971.	
0. 0.	Z 0 1 4 7	22	on 1971.  Q How long has the well been completed in the two zones?	
و د د ه	2 F 8 S 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1 F 1	23	A 1961. First delivered in March 28.	1
2	200 SIMMS	24	Q From both zones?	
`	W.	25	A Both zones, yes, sir.	

	bo you have 1962 production there, for example?
	A I don't have 1962 production. I do have the
I	Q What I'm driving at Mr. Keise T this

What I'm driving at, Mr. Keiss, I think we need something more than just one year's production in order to arrive at a criterion for allocating production to the two zones. Could you furnish us with the annulus production from each of the two zones?

A How far back?

A Well, to 1961 when the well was completed?

A I do not have those figures with me, but I can furnish them to you.

MR. NUTTER: Does anyone else have any questions of Mr. Keiss? He may be excused. Does anyone have anything they wish to offer in Case 4887? If there is nothing further, the case will be taken under advisement.

7

STATE OF NEW MEXICO 1 COUNTY OF BERNALILLO I, JANET RUSSELL, a Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify 3 that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; 5 and that the same is a true and correct record of the said 6 proceedings to the best of my knowledge, skill and ability. 7 C 8 i do hereby certify that the foregoing is a complete record of the proceedings in 9 COURT the Examiner hearing of Case No. 10 New Mexico Off Conservation Commission . Examiner 11 INDEX 12 PAGE SIMMS BLDG. - P.O. BOX 1092 - PHONE 243-6691 - ALBUQUERQUE, NEW MEXICO 87108 1210 FIRST NATIONAL BANK BLDG. EAST - ALBUQUERQUERQUE, NEW MEXICO 87108 WITNESS 13 BRADLEY H. KEISS 14 3 Direct Examination by Mr. Nutter 15 16 17 18 19 20 21 22 23 24 25



#### OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

February 14, 1973

Re:

Case No.

Order No.

GOVERNOR BRUCE KING CHAIRMAN LAND COMMISSIONER

ALEX J. ARMIJO MEMBER

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

4887

	Order No. R-4480		
Mr. B. H. Keyes	Applicant:		
GeoLectric, Inc. Post Office Box 842	GeoLectric, Inc.		
Aztec, New Mexico 87410			
;			
Dear Sir:			
	copies of the above-referenced entered in the subject case.		
	Very truly yours,		
	a L. Verter Co		
	A. L. PORTER, Jr. Secretary-Director		
ALP/ir			
Copy of order also sent t	:0;		
Hobbs OCC X Artesia OCC			
Aztec OCC x			
Other			

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO. 4887 Order No. R-4480

APPLICATION OF GEOLECTRIC, INC. FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

# ORDER OF THE COMMISSION

This cause came on for hearing at 9 a.m. on January 3, 1973, BY THE COMMISSION: at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 14th day of February, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

- That due public notice having been given as required FINDS: by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- That the applicant, GeoLectric, Inc., is the owner and operator of the Ransom Well No. 1, located in Unit I of Section 13, Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico.
- (3) That the applicant proposes to complete the subject well in such a manner as to produce gas from the Aztec-Fruitland and Aztec-Pictured Cliffs Pools through a single string of tubing, commingling in the wellbore the production from said
- That from the Aztec-Fruitland zone, the subject well pools. is capable of extremely low marginal production only.
- (5) That from the Aztec-Pictured Cliffs zone, the subject well is capable of extremely low marginal production only.
- That the reservoir characteristics of the Aztec-(b) That the reservoir characteristics of the Aztec Fruitland and Aztec-Pictured Cliffs zones are such that underground waste would not be caused by the proposed commingling.

Case No. 4887 Order No. R-4480

- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the commingled zones, thereby preventing waste, and will not violate correlative rights.
- (8) That in order to allocate the commingled production to each of the commingled zones in the subject well, 25 percent of the commingled gas production should be allocated to the Aztec-Fruitland Pool, and 75 percent of the commingled gas production to the Aztec-Pictured Cliffs Pool.

### IT IS THEREFORE ORDERED:

(1) That the applicant, GeoLectric, Inc. is hereby authorized to complete its Ransom Well No. 1, located in Unit I of Section 13, Township 29 North, Range 11 Nest, NMPM, San Juan County, New Mexico, in such a manner as to produce gas from the Aztec-Fruitland and Aztec-Pictured Cliffs Pools through a single string of tubing, commingling in the wellbore the production from said pools.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

- (2) That 25 percent of the commingled gas production shall be allocated to the Aztec-Fruitland zone, and 75 percent of the commingled gas production to the Aztec-Pictured Cliffs zone.
- (3) That this commingling authority shall remain in effect only for so long as the attributing of 75 percent of the well's total production to the Aztec-Pictured Cliffs Pool still results in the subject well being classified marginal in said pool.
- (4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO OIL\_CONSERVATION COMMISSION

() June )

BRUCE KING, Chairman

AZEX J. ADMIJO, Member

A. L. PORTER, Jr. Member & Secretary

SEAL

dr/



# Geolectric, Inches

P. O. Box 842 . AZTEC, NEW MEXIC

January 9, 1973

334.6580

334-6824 334-6314

Dan Nutter Chief Engineer N.M. Oil Conservation Commission Santa Fe, New Mexico 87501

Dan,

Transmitted herewith are the production figures for both zones of Ransom #1-I in Section 13, Twnshp 29N, Rge 11W for the year 1960 - 1972.

#### MCF Production

<u>Year</u>	Aztec P.C.	Aztec Fruitle	and
1960	2026	. 0	
1961	20438	6326	
1962	14125	3885	18010 216
1963	10698	3129	13827 226
1964	10083	4012	14095 285
1965	9213	4350	13563 32.1
1966	9713	3489	
1967	7124	3690	
1968	7880	3537	44.63
1969	9205	3743	12 9114 3114
1970	9756	3863	13612 -01
1971	7958	2743	10701 284
1972	8616	3267	11,883 27.5
and the second second second	1.11201	20.0	and And

I got home just in time to come down with a hell of a case of the flu and I'm just now getting on the job a little.

It was nice to visit with you and the others. Also, I sure do appreciate all of the assistance and cooperation.

BHK/mt

63 A36 Pates-P.C. Ø

#### DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 3, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A. Utz, Alternate Examiner:

#### CASE 4723: (Continued from May 17, 1972 and July 12, 1972 Examiner Hearings)

Application of Black River Corporation for pool abolishment, creation of two new gas pools, and a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the abolishment of the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, and the creation of the Washington Ranch-Upper Morrow and Washington Ranch-Lower Morrow Gas Pools for the production of gas from the upper and lower Morrow formations. Applicant further seeks approval of the dual completion (conventional) of its Cities 3 Federal Well No. 1 located in Unit F of Section 3, Township 26 South, Range 24 East, to produce the lower Morrow through tubing and the upper Morrow through the casing-tubing annulus.

#### CASE 4876: (Continued from the December 19, 1972 Examiner Hearing)

Application of Gulf Oil Corporation for an unorthodox oil well location and amendment of Order No. R-2248, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its West Dollarhide Devonian Unit Well No. 118 at an unorthodox location 2540 feet from the South line and 1420 feet from the West line of Section 33, Township 24 South, Range 38 East, West Dollarhide-Devonian Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2248 to provide for administrative approval of additional production and injection wells in the aforesaid unit at unorthodox locations.

CASE 4886: Application of Gulf Oil Corporation for two non-standard proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for two non-standard 80-acre oil proration units comprising the SW/4 NE/4 and NW/4 SE/4, and the SW/4 SE/4 and SE/4 SW/4, of Section 16, Township 24 South, Range 37 East, Fowler-Upper Yeso Pool, Lea County, New Mexico, to be dedicated to applicant's J. R. Holt (NCT-A) Well No. 4 located in Unit J and proposed Well No. 5, to be located in Unit O, respectively, of said Section 16.

#### CASE 4482: (Reopened)

In the matter of Case 4482 being reopened pursuant to the provisions of Order No. R-4093-A, which order continued the special rules and regulations for the Parkway-Strawn Pool, Eddy County, New Mexico, for a period of one year. All interested parties may appear and show cause why said special pool rules should be further extended.

CASE 4887:

Application of GeoLectric, Inc. for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of gas production from the Aztec-Fruitland and Aztec-Pictured Cliffs Gas Pools in the wellbore of its Ransom Well No. 1 located in Unit I of Section 13, Township 29 North, Range 11 West, San Juan County, New Mexico.

CASE 4888:

Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 303 of the Commission Rules and Regulations, authority to commingle production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Upper Pennsylvanian Pools in the wellbore of its State "BA" Well No. 6 located in Unit D of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4889:

Application of Universal Resources Corporation for a non-standard proration unit or in the alternative for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a non-standard gas proration unit comprising the SW/4 and S/2 SE/4 of Section 16, Township 32 North, Range 12 West, Blanco-Mesaverde Pool, San Juan County, New Mexico, to be dedicated to a well to be drilled approximately 1190 feet from the South line and 1850 feet from the West line of said Section 16, or, in the alternative, applicant seeks an order pooling all mineral interests in the Blanco-Mesaverde Pool underlying the entire S/2 of said Section 16 to be dedicated to the aforesaid proposed well. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4890:

Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 303 of the Commission Rules and Regulations, authority to commingle production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Upper Pennsylvanian Pools in the wellbore of its Mobil State Well No. 1 located in Unit H of Section 25, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4891:

Southeastern New Mexico nomenclature case calling for an order for the abolishment, contraction and extension of certain pools in Lea, Chaves, and Eddy Counties, New Mexico.

(a) Abolish the Teague-Grayburg Pool in Lea County, New Mexico, described as:

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NHPM Section 20: SE/4

Section 20: SE/4
Section 21: SW/4

(b) Contract the Bagley-Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

Examiner Hearing - Wednesday - January 3, 1973

# (Case 4891, paragraph (b), continued from page 2)

### TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM Section 35: S/2 NW/4

(c) Extend the North Bagley-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM

Section 26: SW/4

Section 35: S/2 NW/4

TOWNSHIP 12 SOUTH, RANGE 33 EAST, NMPM Section 10: S/2 NW/4

(d) Extend the Anderson Ranch-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM Section 9: SE/4 Section 10: S/2

(e) Extend the Bell Lake-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM Section 31: SW/4

(f) Extend the East Brunson-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM Section 13: SW/4

Section 24: NW/4

(g) Extend the South Carlsbad-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM

Section 1: W/2 Section 2: All Section 3: E/2

(h) Extend the Cerca-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM Section 8: SW/4

Examiner Hearing - Wednesday - January 3, 1973

Docket No. 1-73

# (Case 4891 continued from page 3)

(1) Extend the Double L-Queen Associated Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM Section 5: NW/4

(j) Extend the Flying "M"-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM Section 8: NW/4
Section 32: S/2
Section 33: SW/4

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM Section 5: NW/4
Section 6: NE/4

(k) Extend the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM Section 14: SW/4
Section 15: S/2

1.

.



# Geolectric, Inc.

P. O. Box 842 . AZTEC, NEW MEXICO

November 30 1972 Charly St OIL CONSERVATION COMM

Care 4887

Mr. A. L. Porter, Jr. Secretary-Director N.M. Oil Conservation Commission PO. Box 2088 Santa Fe, New Mexico

I own a dual completion well, the Ransom #1-I in Section 13, Township 29N, Range 11W, San Juan County which is completed in the Aztec Fruitland and Aztec Kange IIW, San Juan County which is completed in the Aztec Fruitiand and Aztec Pictured Cliff Zones. Both wells are Exempt Marginal and have been for some-Mr. Porter, time. The income hardly justifies the continuance of production.

I therefor request that a hearing be set December 19th, if possible, so that the commission may hear evidence supporting approval of down hole commingling of the two for producing zones in this well.

to pc quathand 169.9

1 t. M. 19 Land BHP 2+ 169.9

1 amulus for BHP 2+ 172.4

1911 PC 7,958 soo cuft

24 2,743,000 cuft

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

CASE NO.

Order No.

APPLICATION OF GEOLECTRIC, INC. FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

THE COMMISSION:

This cause came on for hearing at 9 a.m. on January at Santa Fe, New Mexico, before Examiner Daniel S. Nutter January 3

NOW, on this day of January, 1973, the Commission, a guerum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, GeoLectric, Inc., is the owner and operator of the Ransom Well No. 1, located in Unit I of Section 13, Township 29 North, Range 21 West, NMPM, San Juan County, New Mexico.

Case No. 4887 Order No. R-

That the applicant proposes to complete the subject well in such a manner as to produce gas from the Aztec-Fruitland and Afec-Pictured Cliffs Pools through a single material string of tubing, commingling in the wellbore the production from the

# commingled zones by means of a pauker.

- (4) That from the Aztec-Fruitland zone, the subject well is capable of extremely low marginal production only.
- (5) That from the Aztec-Pictured Cliffs zone, the subject well is capable of extremely low marginal production only.
- (6) That the reservoir characteristics of the Aztec-Fruitland and Aztec-Pictured Cliffs zones are such that underground waste would not be caused by the proposed commingling.
- (7) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the commingled zones, thereby preventing waste, and will not violate correlative rights.
- (8) That in order to allocate the commingled production to each of the commingled zones in the subject well, 25 persent of the commingled gas production should be allocated to the Aztec-Fruitland Pool, and 75 person of the commingled gas production to the Aztec-Pictured Cliffs Pool.

## IT IS THEREFORE ORDERED:

(1) That the applicant, GeoLectric, Inc. is hereby authorized to complete its Ransom Well No. 1, located in Unit I of Section 13 Township 29 North, Range 11 West, NMPM, San Juan County, New Mexico, in such a manner as to produce gas from the Aztec-Fruitland and Aztec-Pictured Cliffs Pools through a single string of tubing, commingling in the wellbore the production from the ha and Aztec-Pictured Cliffs Pools; with separation of and the commingled zones by means of a

packer

-3-Case No. 4887 Order No. R-

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the Annual cas-oll Ratio Test Period for the Aztec-Fruitland and Aztec-Pictured Cliffs Pools.

(2) That 25 of the commingled gas production shall be allocated to the Aztec-Fruitland zone, and 15 percent of the commingled gas production to the Aztec-Pictured Cliffs zone.

daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the

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

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

(3) That this Commingling anthority share semain in effect only for so long are semain in effect only for so long are the albritanting of 15 persons of the writes with the 43 textured Oliffs from the transition in Pictured Cliffs from the subject week being sharefield the subject week being sharefield marginal in said pool.

ON COMMAN WANTED COMMINGERING THE CONTRACTURE OF THE TOTAL T