

CASE 3141: Application of CAULKINS  
for a non-standard location and a  
dual completion, Rio Arriba County

CASE No.

3141

Application,  
TRANSCRIPTS,  
SMALL Exhibits  
ETC.

BEFORE THE OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CAULKINS OIL COMPANY FOR APPROVAL  
OF DUAL COMPLETION OF ITS BREECH B  
WELL NO. PD-123 AND ITS BREECH C WELL  
NO. D-144 AND FOR UNORTHODOX WELL  
LOCATIONS IN THE PICTURED CLIFFS AND  
THE SOUTH-BLANCO-TOCITO POOLS, RIO  
ARRIBA COUNTY, NEW MEXICO.

A P P L I C A T I O N

Comes now Caulkins Oil Company and applies to the Oil  
Conservation Commission of New Mexico for the following:

1. Approval of the dual completion of its Breech B  
Well No. PD-123, located 700 feet from the North line and  
1,800 feet from the East line of Section 7, Township 26  
North, Range 6 West, N.M.P.M., for production from the South  
Blanco-Pictured Cliffs Gas Pool and the Basin Dakota Gas Pool,  
Rio Arriba County, New Mexico.
2. Approval of an unorthodox well location for the Breech  
B Well No. PD-123 for production from the South Blanco-Pictured  
Cliffs Gas Pool at the above-described location.
3. Approval of the dual completion of its Breech C Well  
No. D-144, located 990 feet from the North line and 1,090  
feet from the East line of Section 12, Township 26 North,  
Range 6 West, N.M.P.M., for production from the Basin Dakota  
Gas Pool, and the South Blanco-Tocito Pool, Rio Arriba County,  
New Mexico.
4. Approval of an unorthodox well location for the Breech  
C Well No. D-144 for production from the South Blanco-Tocito  
Pool at the above described location.

DOCKET MAILED

Date 10/20/64

Submitted herewith are plats showing the area involved in this application, together with schematic diagrams of the proposed dual completions.

Approval of this application is in the interests of conservation and the prevention of waste.

WHEREFORE, applicant pray that this application be set for hearing before the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving the application of Caulkins Oil Company in this case.

Respectfully submitted,

CAULKINS OIL COMPANY

By

*Jason W. Kellahin*

Kellahin & Fox  
P. O. Box 1769  
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

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. 3141  
Order No. R-2809

APPLICATION OF CAULKINS OIL COMPANY  
FOR A NON-STANDARD LOCATION AND A  
DUAL COMPLETION, RIO ARriba COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 12, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 24th day of November, 1964, 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,

FINDS:

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

(2) That the applicant, Caulkins Oil Company, seeks an exception to the Special Rules and Regulations governing the South Blanco-Tocito Pool to drill its Breech C Well No. D-144 at an unorthodox location 990 feet from the North line and 1090 feet from the East line of Section 12, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant also seeks authority to complete the subject well as a dual completion (conventional) to produce oil from the South Blanco-Tocito Pool through 2 3/8-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1 1/4-inch tubing, with separation of zones by a packer set at approximately 7436 feet.

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CASE No. 3141  
Order No. R-2809

(4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby granted an exception to the Special Rules and Regulations governing the South Blanco-Tocito Pool to drill its Breech C Well No. D-144 at an unorthodox location 990 feet from the North line and 1090 feet from the East line of Section 12, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant is hereby authorized to complete the subject well as a dual completion (conventional) to produce oil from the South Blanco-Tocito Pool through 2 3/8-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1 1/4-inch tubing, with separation of zones by a packer set at approximately 7436 feet;

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 Deliverability Test Period for the Basin-Dakota Gas Pool.

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

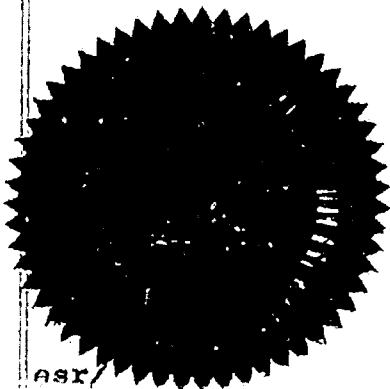
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

*E. S. Walker*  
E. S. WALKER, Member

*A. L. Porter, Jr.*  
A. L. PORTER, Jr., Member & Secretary



asr/

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
E. B. JOHNNY WALKER  
MEMBER

P. O. BOX 2088  
SANTA FE

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

November 24, 1964

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

Re: CASE NO. 3141 and 3142  
ORDER NO. R-2809 and R-2810  
APPLICANT Caulkins & N. B. Hunt

Dear Sir:

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

Very truly yours,

*A. L. Porter, Jr.*  
A. L. PORTER, Jr.  
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC   x  

Artesia OCC           

Aztec OCC           

OTHER

**JMD/esr**

CF Subj. \_\_\_\_\_

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

CASE No. 3141

Order No. R- 2809

APPLICATION OF CAULKINS OIL COMPANY  
FOR A NON-STANDARD LOCATION AND A  
DUAL COMPLETION, RIO ARriba COUNTY,  
NEW MEXICO.

### ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 12, 1964, at Santa Fe, New Mexico, before Examiner ~~Daniel S. Hutter~~ Elvis A. Utz.

NOW, on this \_\_\_\_\_ day of November, 1964, 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,

**FINDS:**

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

(2) That the applicant, Caulkins Oil Company, seeks an exception to the Special Rules and Regulations governing the South Blanco-Tocito Pool to drill its Breech C Well No. D-144 at an unorthodox ~~South Blanco-Tocito~~ location 990 feet from the North line and 1090 feet from the East line of Section 12, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant also seeks authority to complete the subject well as a dual completion (conventional) to produce



oil from the South Blanco-Tocito Pool through 2 3/8-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1 1/4-inch tubing, with separation of zones by a packer set at approximately 2136 feet.

*(4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.*  
*(5) That approval of the subject application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.*

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby granted an exception to the Special Rules and Regulations governing the South Blanco-Tocito Pool to drill its Breech C Well No. D-144 at an unorthodox ~~South Blanco-Tocito~~ location 990 feet from the North line and 1090 feet from the East line of Section 12, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

(2) That the applicant is hereby authorized to complete the subject well as a dual completion (conventional) to produce oil from the South Blanco-Tocito Pool through 2 3/8-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1 1/4-inch tubing, with separation of zones by a packer set at approximately 2136 feet;

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

delamination tests upon completion and annually thereafter  
leakage

-3-

CASE No. 3141

during the Deliverability Test Period for the Basin-Sakata  
Gas Pool.

(3) 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.

JK

Cavalcade Oil Company  
Plots & stock registered in  
your letter of 10-25-64  
for Branch "C" TD-144

Case 3141

DOCKET: EXAMINER HEARING - THURSDAY - NOVEMBER 12, 1964

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 3129: (Continued from the October 13, 1964 Examiner Hearing).  
Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Wilson Deep Unit Area comprising 3360 acres, more or less, of State and Fee lands in Township 21 South, Range 34 East, Lea County, New Mexico.

CASE 3138: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider exempting certain oil pools in Lea, Chaves, Roosevelt and Eddy Counties, New Mexico, from the gas-oil ratio testing requirements of Rule 301 of the Commission Rules and Regulations. The following pools will be considered for exemption:

ARTESIA DISTRICT

Atoka-San Andres	Leo-Queen-Grayburg, South
Atoka-Grayburg	Leslie Spring-San Andres
Benson-Yates, East	Linda-San Andres
Bitter Lakes-San Andres, South	Loco Hills-San Andres, South
Bitter Lakes-San Andres, West	Logan Draw-San Andres
Brown, Q. Gbr.	Malaga-Delaware
Brushy Draw-Delaware	McMillan Seven Rivers-Queen, East
Canyon-Wolfcamp	Millman-Seven Rivers, East
Carlsbad-Delaware	Palmillo-Seven Rivers
Cass Draw-Delaware	Parallel-Delaware
Cave (Gbr.)	Pecos-Delaware
Case-San Andres, West	Pecos-San Andres
Cedar Lake-Cisco	Penasco-San Andres
Chisum-Devonian	Penasco-Wolfcamp
Corral Canyon-Delaware	Quahada Ridge-Delaware
Cotton Draw-Brushy Canyon	Red Hills- Yates
Coyote-Queen	Red Lake-Queen-Grayburg, East
Dark Canyon-Delaware	Red Lake-Seven Rivers, South
Dayton-Abo	Remuda-Wolfcamp
Dayton-Grayburg, East	Round Tank-San Andres
Dayton-San Andres, West	Saladar-Yates
Diablo-San Andres	Sand Tank-Queen
Dog Canyon-Grayburg	Shugart-Bone Springs
Dos Hermanos, Yates-Seven Rivers	Shugart-Wolfcamp
Eagle Creek-San Andres	Square Lake Grayburg-San Andres, North
Empire Paddock	Sulphate Draw-Delaware
Empire-Yates-Seven Rivers, E.	Twin Lakes-Devonian
Four Mile Draw-San Andres	U. S. Delaware
Fren Paddock	Welch-Delaware
Hackberry-Seven Rivers	White Ranch Siluro-Devonian
Hackberry-Yates, North	White Ranch-Devonian, West
L. E. Ranch-San Andres	Windmill-San Andres

HOBBS DISTRICT

Baish-Wolfcamp, North	Hume-Queen, West
Baum-Wolfcamp	Jenkins-Devonian
Bishop Canyon-Queen	Jenkins-San Andres
Bowers-Seven Rivers	King-Wolfcamp
Caprock-Wolfcamp, East	Lea-Yates
CLR-San Andres	Littman-San Andres
Corbin-Queen, South	Lone-Wolfcamp
Corbin-Yates	Lovington-San Andres
Crossroads-Mississippian	Lovington-San Andres, West
Crossroads-San Andres, West	Lynch-Yates, Middle
Dollarhide-Queen	Pearl-Pennsylvanian
Dublin-Devonian	Querecho Plains-Bone Springs
Echols-Devonian, East	Querecho Plains-Delaware
Echols-Devonian, North	Querecho Plains-Yates
Edson-Pennsylvanian	Teague-Devonian
Elliott-Abo	Teague-Ellenburger
Field Ranch-Wolfcamp	Teague Simpson
Gladiola-Wolfcamp, South	Warren-Abo
Hume-Queen	Williams-Pennsylvanian, North
	Young-San Andres

CASE 3139: Application of Shell Oil Company for a dual completion and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the S/2 SW/4, NE/4 SW/4, and SW/4 SE/4 of Section 3, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico, to be dedicated to its Livingston Well No. 7 located in Unit V of said Section 3. Applicant further seeks approval of said well as a dual completion (conventional) to produce oil from the Drinkard Pool through 2-3/8 inch tubing and to produce gas from the Tubb Gas Pool through the casing-tubing annulus.

CASE 3140: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Breech B Well No. PD-123 to be located 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Applicant further seeks authority to complete said well as a dual completion (conventional) to produce gas from the South Blanco-Pictured Cliffs Pool through 1-1/4 inch tubing and to produce gas from the Basin-Dakota Gas Pool through 2-3/8 inch tubing.

CASE 3141: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Breech C Well No. D-144 to be located 990 feet from the North line and 1,090 feet from the East line of Section 12, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Applicant further seeks authority to complete said well as a dual completion (conventional) to produce oil from the South Blanco-Tocito Pool through 2-3/8 inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1-1/4 inch tubing.

CASE 3142: Application of N. B. Hunt for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 280-acre non-standard gas proration unit comprising the SW/4, W/2 SE/4, and SE/4 SE/4 of Section 21, Township 21 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to his Wantz Well No. 2 located in Unit L of said Section 21. In the event all of said acreage is not approved for said Well No. 2, applicant seeks approval of another non-standard unit comprising the remaining acreage to be dedicated to his Wantz Well No. 1 in Unit A of said Section 21.

CASE 3143: Application of Texaco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its H. H. Harris Well No. 2 located in Unit O of Section 35, Township 12 South, Range 38 East, Lea County, New Mexico, as a dual completion (combination) to produce oil from the Bronco Wolfcamp Pool through 2-7/8 inch casing and to produce oil from the Bronco Siluro-Devonian Pool through tubing in a parallel string of 3-1/2 inch casing cemented in a common well bore.

CASE 3144: Application of Texaco Inc. for force-pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Drinkard Pool underlying the SE/4 of the SW/4 of Section 17, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 3145: Application of Sunray DX Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State "AS" Well No. 1 located in Unit G of Section 29, Township 11 South, Range 33 East, Lea County, New Mexico, as a dual completion to produce oil from the Pennsylvanian formation through tubing and to dispose of produced salt water down the production-intermediate casing annulus into the San Andres, Glorieta, and Tubb formations from 3840 feet to 8600 feet.

CASE 2660: (Reopened and continued from the October 28th Examiner Hearing)  
In the matter of Case No. 2660 being reopened pursuant to the provisions of Order No. R-2348-A, which continued the original order establishing 80-acre proration units for the Middle Lane-Pennsylvanian Pool, Lea County, New Mexico, for an additional year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

Case 3141

Heard 11-12-64

Rec. 11-13-64

1. Grant Caulkins Oil Co. permission to  
Drill complete (conventional) their  
Breech 'C' T-144 980/N, 1090/E sec. 12-26 N-6 W-  
in the So. Blanco-Tocito and Basin -  
Dakota Pool.
2. Also Grant a non-std. location for  
the S. Blanco-Tocito completion for this  
well.

Shuck. H. J.

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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PAGE 1

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
November 12, 1964

EXAMINER HEARING

----- )  
IN THE MATTER OF: Application of Caulkins Oil )  
Company for a non-standard location and a dual )  
completion, Rio Arriba County, New Mexico. )  
Applicant, in the above-styled cause, seeks )  
approval of an unorthodox location for its )  
Breech C Well No. D-144 to be located 990 )  
feet from the North line and 1090 feet from )  
the East line of Section 12, Township 26 )  
North, Range 6 West, Rio Arriba County, New )  
Mexico. Applicant further seeks authority to )  
complete said well as a dual completion )  
(conventional) to produce oil from the South )  
Blanco-Tocito Pool through 2-3/8 inch tubing )  
and to produce gas from the Basin-Dakota Gas )  
Pool through 1-1/4 inch tubing. )  
----- )

Case No. 3041

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING





MR. UTZ: The next case will be Case 3141. Let the record show that the witness in this case has previously been sworn.

MR. DURRETT: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico.

MR. KELLAHIN: Let the record show the same appearance for the Applicant.

(Whereupon, Applicant's Exhibits 1, 2 & 3 marked for identification.)

FRANK GRAY, called as a witness, having been previously sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Are you familiar with the application of CAulkins Oil Company in Case 3141?

A Yes.

Q Would you state briefly what's proposed in this case?

A We seek Commission approval of an unhorthodox Tocito Well location in the South Blanco-Tocito Pool, and also approval of a dual Tocito-Dakota completion.

Q Referring to what has been marked as Exhibit Number 1 in this case, would you identify that exhibit, please?

A Exhibit Number 1 is a map showing the location of

the Breech C Well No. TD-144 and the ownership of the acreage surrounding it. Shown in a solid red line is the acreage dedicated to the Dakota completion; the broken line is the acreage dedicated to the Tocito completion; the boundary of the South Blanco-Tocito water injection project is shown in blue.

Q Referring to what has been marked as Exhibit Number 2, would you identify that exhibit, please?

A Exhibit Number 2 is a Schlumberger induction electrolog of the well.

Q What information, if any, has been marked on the log?

A On the intervals, the producing intervals, the formation tops and perforated intervals are shown on that log.

Q Now, referring to what has been marked as Exhibit Number 3, would you identify that exhibit and discuss the information shown on that, please?

A Exhibit 3 is the diagrammatic sketch showing the downhole mechanical arrangement of the equipment.

Q Is that a conventional type of dual completion that has been approved by this Commission in other instances?

A Yes, sir, this installation is almost identical to the mechanical arrangement we have in our dual Tocito-Dakota Breech Well TD-189, and the Breech "A", TD-140 in Section 11.

The TD-189 Well is located in Section 12, the same section in which this well is located.

Q In your opinion, are all producing formations encountered in this wellbore fully protected?

A Yes, sir, I think they are adequately protected in this one. This well was drilled in 1964 in compliance with Commission Rules and Regulations in force at this time.

The 5 1/2-inch casing was set at 7748, which is about two feet off bottom, and cemented with 600 sacks of 12 percent Gel cement, followed by 100 sacks of latex-cement. The top of this stage of cement from the temperature log was 4790. After perforating and fracturing and testing the wells in both the Dakota zone and Tocito zone, we set a plug above the Tocito zone and then perforated the 5 1/2-inch casing at 4700 feet, and cemented through the perforations with 290 sacks of 12 percent gel cement, followed by 100 sacks neat.

Now, this is the volume calculated from the caliper log required to fill the annulus to 3020 feet. That's 200 feet above the Pictured Cliffs sand, plus 18 percent.

This cement job was done in a conventional manner. However, the Bradenhead was closed when 10 barrels of cement remained to be displaced out of the 5 1/2-inch, to accomplish what we call a Bradenhead squeeze.

After the cement set 24 hours we drilled it out opposite the perforations and tested with 2,000 pounds water pressure for 45 minutes and there was no loss of pressure during that

test, so we feel that the perforations are adequately closed.

Q What occasions the need for an unorthodox location for this well, and in which formations?

A Tocito spacing requirements are for wells to be drilled on an 80-acre staggered pattern, one to be in the southeast corner of the quarter section and one in the northwest corner of the quarter section. For that reason a well cannot be drilled that will satisfy both Dakota spacing and Tocito spacing.

Q This would be a conventional location for the Dakota, is that correct?

A It is conventional for the Dakota zone. The Dakota requirements are 990, the same as the other gas wells in the San Juan Basin, with 200 foot tolerance. This well is located 990 from the North line and 1090 from the East line of Section 12, 26 North, 6 West.

Q Has a packer leakage test been performed on this well?

A Yes, sir, it has been conducted, both zones tested, and there's no apparent communication between zones.

Q Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1, 2 and 3.

MR. UTZ: Without objection, Exhibits 1, 2 and 3 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1, 2 & 3 were admitted in evidence.)

MR. KELLAHIN: That completes the direct examination of this witness.

CROSS EXAMINATION

BY MR. UTZ:

Q I missed a little of your cementing program. I think it's all written here, but I would rather discuss it a little bit. Your 5 1/2-inch was cemented from 7748 to where?

A The top of the first stage was at 4790.

Q That would come up above the Tocito?

A The 4790 would bring it back even above the Cliffhouse.

Q That was all done in one stage?

A Yes, sir.

Q What have you got above 4790?

A The Chocra, which is very poorly developed, and the Pictured Cliffs, which is also very poorly developed, but both of them are covered with cement. The only interval that's not cemented would be from 4700 to 4790. That is 200 feet above the Pictured Cliffs.

Q Yes, it's up in the shale, whatever it is. Now, your

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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NSL is only for the Tocito?

A Yes.

MR. UTZ: Are there any other questions of the witness? Any statements in this case?

MR. KELLAHIN: That's all.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. UTZ: The case will be taken under advisement.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 21st day of November, 1964.

*Ada Dearnley*  
Notary Public - Court Reporter

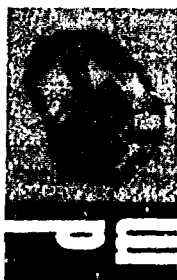
My Commission Expires:  
June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3141, heard by me on *Nov 12*, 19*64*.  
*Thos. A. J.*, Examiner  
New Mexico Oil Conservation Commission

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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PAGE 1

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
November 12, 1964

EXAMINER      HEARING

-----  
IN THE MATTER OF: Application of Caulkins Oil )  
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the East line of Section 12, Township 26 )  
North, Range 6 West, Rio Arriba County, New )  
Mexico. Applicant further seeks authority to )  
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(conventional) to produce oil from the South )  
Blanco-Tocito Pool through 2-3/8 inch tubing )  
and to produce gas from the Basin-Dakota Gas )  
Pool through 1-1/4 inch tubing. )  
-----

Case No. 3141

BEFORE:      Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING



MR. UTZ: The next case will be Case 3141. Let the record show that the witness in this case has previously been sworn.

MR. DURRETT: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico.

MR. KELLAHIN: Let the record show the same appearance for the Applicant.

(Whereupon, Applicant's Exhibits 1, 2 & 3 marked for identification.)

FRANK GRAY, called as a witness, having been previously sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Are you familiar with the application of CAulkins Oil Company in Case 3141?

A Yes.

Q Would you state briefly what's proposed in this case?

A We seek Commission approval of an unorthodox Tocito Well location in the South Blanco-Tocito Pool, and also approval of a dual Tocito-Dakota completion.

Q Referring to what has been marked as Exhibit Number 1 in this case, would you identify that exhibit, please?

A Exhibit Number 1 is a map showing the location of

the Breech C Well No. TD-144 and the ownership of the acreage surrounding it. Shown in a solid red line is the acreage dedicated to the Dakota completion; the broken line is the acreage dedicated to the Tocito completion; the boundary of the South Blanco-Tocito water injection project is shown in blue.

Q Referring to what has been marked as Exhibit Number 2, would you identify that exhibit, please?

A Exhibit Number 2 is a Schlumberger induction electrolog of the well.

Q What information, if any, has been marked on the log?

A On the intervals, the producing intervals, the formation tops and perforated intervals are shown on that log.

Q Now, referring to what has been marked as Exhibit Number 3, would you identify that exhibit and discuss the information shown on that, please?

A Exhibit 3 is the diagrammatic sketch showing the downhole mechanical arrangement of the equipment.

Q Is that a conventional type of dual completion that has been approved by this Commission in other instances?

A Yes, sir, this installation is almost identical to the mechanical arrangement we have in our dual Tocito-Dakota Breech Well TD-189, and the Breech "A", TD-140 in Section 11.

The TD-189 Well is located in Section 12, the same section in which this well is located.

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Q In your opinion, are all producing formations encountered in this wellbore fully protected?

A Yes, sir, I think they are adequately protected in this one. This well was drilled in 1964 in compliance with Commission Rules and Regulations in force at this time.

The 5 1/2-inch casing was set at 7748, which is about two feet off bottom, and cemented with 600 sacks of 12 percent Gel cement, followed by 100 sacks of latex cement. The top of this stage of cement from the temperature log was 4790. After perforating and fracturing and testing the wells in both the Dakota zone and Tocito zone, we set a plug above the Tocito zone and then perforated the 5 1/2-inch casing at 4700 feet, and cemented through the perforations with 290 sacks of 12 percent gel cement, followed by 100 sacks neat.

Now, this is the volume calculated from the caliper log required to fill the annulus to 3020 feet. That's 200 feet above the Pictured Cliffs sand, plus 18 percent.

This cement job was done in a conventional manner. However, the Bradenhead was closed when 10 barrels of cement remained to be displaced out of the 5 1/2-inch, to accomplish what we call a Bradenhead squeeze.

After the cement set 24 hours we drilled it out opposite the perforations and tested with 2,000 pounds water pressure for 45 minutes and there was no loss of pressure during that

test, so we feel that the perforations are adequately closed.

Q What occasions the need for an unorthodox location for this well, and in which formations?

A Tocito spacing requirements are for wells to be drilled on an 80-acre staggered pattern, one to be in the southeast corner of the quarter section and one in the northwest corner of the quarter section. For that reason a well cannot be drilled that will satisfy both Dakota spacing and Tocito spacing.

Q This would be a conventional location for the Dakota, is that correct?

A It is conventional for the Dakota zone. The Dakota requirements are 990, the same as the other gas wells in the San Juan Basin, with 200 foot tolerance. This well is located 990 from the North line and 1090 from the East line of Section 12, 26 North, 6 West.

Q Has a packer leakage test been performed on this well?

A Yes, sir, it has been conducted, both zones tested, and there's no apparent communication between zones.

Q Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1, 2 and 3.

MR. UTZ: Without objection, Exhibits 1, 2 and 3 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1, 2 & 3 were admitted in evidence.)

MR. KELLAHIN: That completes the direct examination of this witness.

CROSS EXAMINATION

BY MR. UTZ:

Q I missed a little of your cementing program. I think it's all written here, but I would rather discuss it a little bit. Your 5 1/2-inch was cemented from 7748 to where?

A The top of the first stage was at 4790.

Q That would come up above the Tocito?

A The 4790 would bring it back even above the Cliffhouse.

Q That was all done in one stage?

A Yes, sir.

Q What have you got above 4790?

A The Chocra, which is very poorly developed, and the Pictured Cliffs, which is also very poorly developed, but both of them are covered with cement. The only interval that's not cemented would be from 4700 to 4790. That is 200 feet above the Pictured Cliffs.

Q Yes, it's up in the shale, whatever it is. Now, your

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NSL is only for the Tocito?

A Yes.

MR. UTZ: Are there any other questions of the witness? Any statements in this case?

MR. KELLAHIN: That's all.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. UTZ: The case will be taken under advisement.

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STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 21st day of November, 1964.

*Ada Dearnley*  
Notary Public - Court Reporter

My Commission Expires:  
June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3141, heard by me on Nov. 12, 1964.  
*Wm. A. Duff*, Examiner  
New Mexico Oil Conservation Commission