

CASE 2726: Appli. of CONTINENTAL  
for the dual completion of its  
RATTLESNAKE WELL NO. 144.

Case No.

2726

petition, Transcript,

and Exhibits, Etc.

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. 2726  
Order No. R-2407

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR A DUAL COMPLETION, SAN JUAN COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 3, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 16th day of January, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Continental Oil Company, seeks permission to complete its Rattlesnake Well No. 144, located in Unit N of Section 2, Township 29 North, Range 19 West, NMPM, San Juan County, New Mexico, as a dual completion (conventional) to produce gas from the Hogback Zone of the Upper Pennsylvanian formation through the casing-tubing annulus and to produce oil from the Rattlesnake Zone of the Lower Pennsylvanian formation through a string of 2 7/8-inch tubing, separation of zones to be achieved by a retainer production packer set at approximately 6480 feet.

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

(4) That approval of the subject application will neither cause waste nor impair correlative rights.

-2-

CASE No. 2726  
Order No. R-2407

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to complete its Rattlesnake Well No. 144, located in Unit N of Section 2, Township 29 North, Range 19 West, NMPM, San Juan County, New Mexico, as a dual completion (conventional) to produce gas from the Hogback Zone of the Upper Pennsylvanian formation through the casing-tubing annulus and to produce oil from the Rattlesnake Zone of the Lower Pennsylvanian formation through a parallel string of 2 7/8-inch tubing, separation of zones to be achieved by a retainer production packer set at approximately 6480 feet.

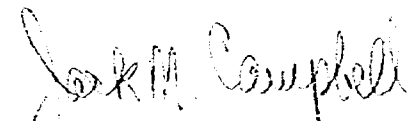
PROVIDED HOWEVER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.

PROVIDED FURTHER, That the applicant shall take packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Rattlesnake Zone of the Lower Pennsylvanian formation, and at such other times as the Secretary-Director of the Commission may prescribe.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



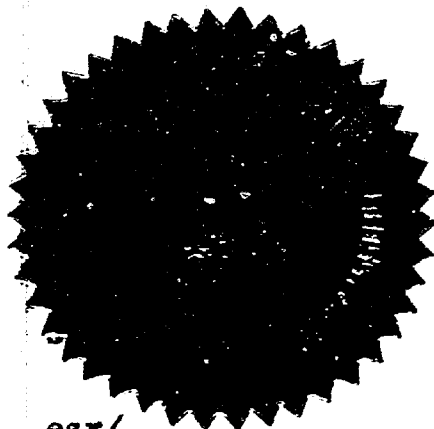
JACK M. CAMPBELL, Chairman



E. S. WALKER, Member



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



esr/

DRAFT

JMD/csr  
January \_\_, 1963

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. 2726

Order No. R-2407

APPLICATION OF CONTINENTAL OIL COMPANY  
FOR A DUAL COMPLETION, SAN JUAN COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 3, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this \_\_\_\_ day of January, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Continental Oil Company, seeks permission to complete its Rattlesnake Well No. 144, located in Unit N of Section 2, Township 29 North, Range 19 West, NMPM, San Juan County, New Mexico, as a dual completion (conventional) to produce gas from the <sup>the upper part of the</sup> Upper Pennsylvanian formation through a ~~parallel string~~ <sup>the casing-tubing annulus</sup> ~~space~~ <sup>of</sup> ~~2 7/8~~ <sup>2 7/8</sup>-inch tubing and to produce oil from the Lower Pennsylvanian formation through a ~~parallel~~ string of <sup>2 7/8</sup>-inch tubing, <sup>separation of zones to be achieved by a retriever production packer set at approx 6480 feet.</sup>

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

(4) That approval of the subject application will neither cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to complete its Rattlesnake Well No. 144, located in Unit N of Section 2, Township 29 North, Range 19 West, NMPM, San Juan County, New Mexico, as a dual completion (conventional) to produce gas from the <sup>Hogback Zone of the</sup> Upper Pennsylvanian formation through <sup>the casing-tubing annulus</sup> ~~a parallel string of~~ <sup>2</sup> inch tubing and to produce oil from the <sup>Rattlesnake Zone of the</sup> Lower Pennsylvanian formation through a parallel string of <sup>2 7/8</sup> - inch tubing, <sup>separation of zones to be achieved by a 7" retainer production packer set at approximately 6480 feet.</sup>

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 Gas-Oil Ratio Test Period for the <sup>Lower Pennsylvanian</sup> formation, and at such other times as the Secretary-Director of the Commission may prescribe.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

Case - 726

OIL CONSERVATION COMMISSION  
Aztec DISTRICT

OIL CONSERVATION COMMISSION  
BOX 871  
SANTA FE, NEW MEXICO

DATE 12-12-62

Re: Proposed NSP \_\_\_\_\_

Proposed NWU \_\_\_\_\_

Proposed NSL \_\_\_\_\_

Proposed NFO \_\_\_\_\_

Proposed DC XXXX

Gentlemen:

I have examined the application dated 12-6-62  
for the Continental Oil Co. Rattlesnake #144 N-2-29-19  
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

*That the matter be set for*  
*hearing*  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

*A. R. Kendrick*  
A. R. Kendrick

## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
December 6, 1967

Mr. A. L. Porter, Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed is an application requesting administrative approval to finally complete an existing Pennsylvanian well at the Rattlesnake Field, San Juan County, New Mexico. Both the Lower oil zone, and the Upper gas zone are in the Pennsylvanian formation. The Lower zone will be produced through 2 7/8" tubing by artificial lift, and the Upper gas zone will be produced through the casing-tubing annulus. The two zones will be isolated by means of a permanent type production packer.

Yours very truly,



E. E. Jensen  
Assistant District Superintendent  
Durango District  
Production Department

GAR/eb

Attachments

cc: Mr. E. E. White, Continental Oil Company, Denver, Colorado (3)  
NEOCC-Action (2)



## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name		<b>Rattlesnake Pennsylvanian</b>		County	<b>San Juan</b>	Date	<b>12-6-62</b>
Operator		<b>Continental Oil Company</b>		Lease	<b>Rattlesnake</b>	Well No.	<b>144</b>
Location of Well	Unit	Section	Township	Range			
	<b>N</b>	<b>2</b>	<b>29N</b>	<b>19W</b>			

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO ☒ \_\_\_\_\_
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator, Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone (Gas)	Lower Zone (Oil & Gas)
a. Name of reservoir		
b. Top and Bottom of Pay Section (Perforations)	6402'-6406' 6442'-6446'	6689'-6567'
c. Type of production (Oil or Gas)	Gas	Oil & Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Artificial Lift

4. The following are attached. (Please mark YES or NO)

- ☒ a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- ☒ b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- ☒ c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*
- ☒ d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

**Humble Oil and Refining Company - Box 3082, Durango, Colorado**

**Kern County Land Company - Box 1784, Albuquerque, New Mexico**

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO \_\_\_\_\_. If answer is yes, give date of such notification **December 6, 1962**

CERTIFICATE: I, the undersigned, state that I am the **Asst. District Supt.** of the **Continental Oil Company** (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

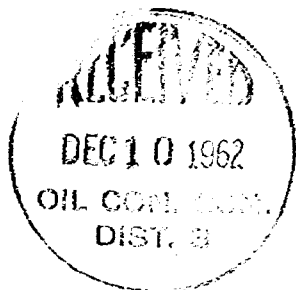
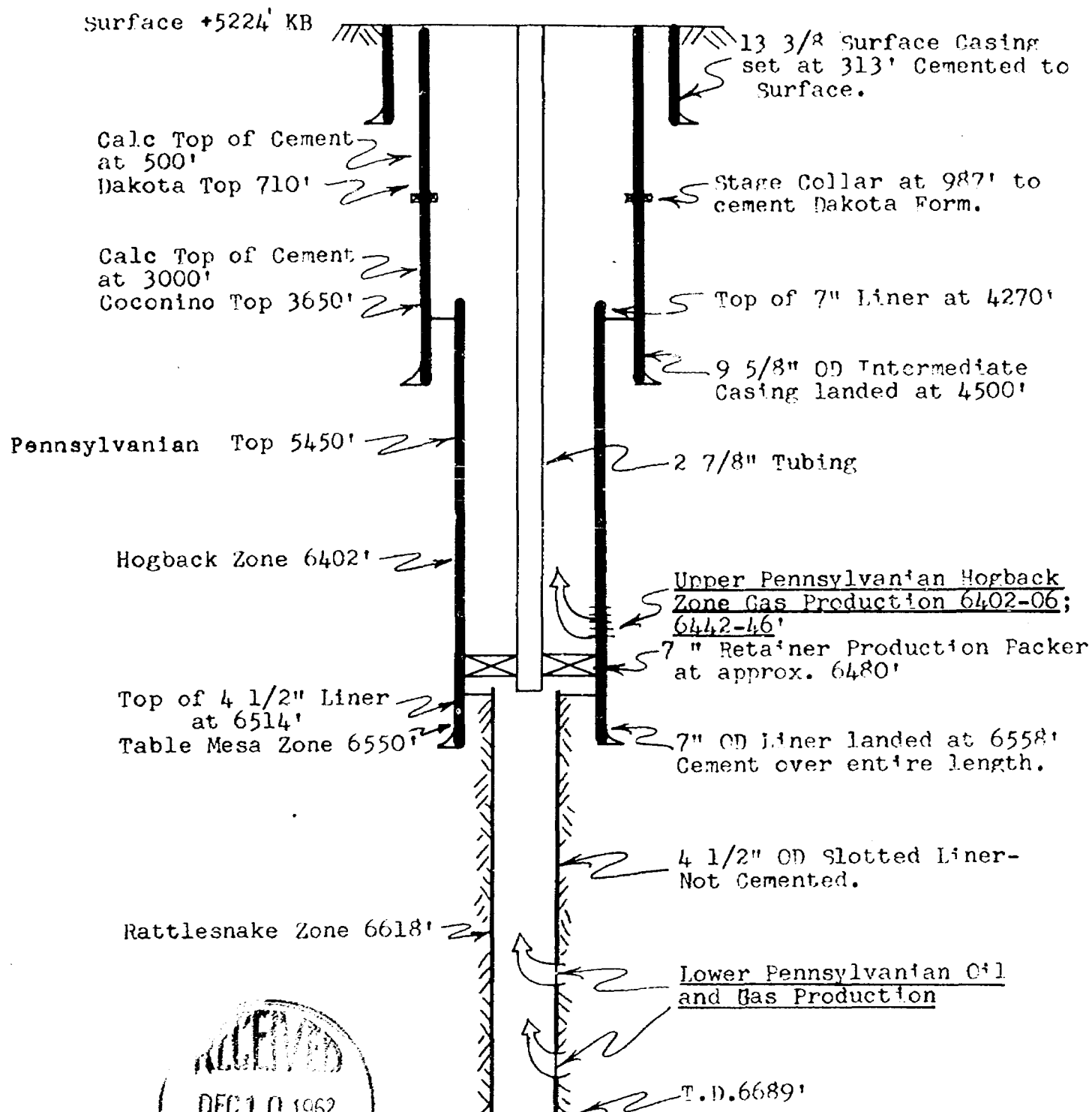
\* Both zones are in the Pennsylvanian Formation.

ORIGINAL SIGNED BY  
R. E. JENSEN

Signature

- \* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.
- NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard perforation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

CONTINENTAL OIL COMPANY  
Proposed Dual Completion  
of  
RATTLESNAKE WELL #144  
SE-SW, Sec. 2, T29N, R19W  
San Juan Co., New Mexico  
Oil Production from Lower Pennsylvanian  
Gas Production from Upper Pennsylvanian



*Eax 2726*

## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
December 6, 1962

Mr. A. L. Porter, Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed is an application requesting administrative approval to dually complete an existing Pennsylvanian well at the Rattlesnake Field, San Juan County, New Mexico. Both the Lower oil zone, and the Upper gas zone are in the Pennsylvanian formation. The Lower zone will be produced through 2 7/8" tubing by artificial lift, and the Upper gas zone will be produced through the casing-tubing annulus. The two zones will be isolated by means of a permanent type production packer.

Yours very truly,



R. E. Jensen  
Assistant District Superintendent  
Durango District  
Production Department

GAB/cb

Attachments

cc: Mr. R. E. White, Continental Oil Company, Denver, Colorado (3)  
MSOCC-Astec (2)

# NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

## APPLICATION FOR DUAL COMPLETION

*Case*  
27267-3-58

Field Name <b>Rattlesnake Pennsylvanian</b>		County <b>San Juan</b>	Date <b>12-6-62</b>
Operator <b>Continental Oil Company</b>		Lease <b>Rattlesnake</b>	Well No. <b>144</b>
Location of Well Unit <b>N</b>	Section <b>2</b>	Township <b>29N</b>	Range <b>19W</b>

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☐ NO ☒
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone (Gas)	Lower Zone (Oil & Gas)
a. Name of reservoir		
b. Top and Bottom of Pay Section (Perforations)	6402'-6406' 6442'-6446'	6689'-6567'
c. Type of production (Oil or Gas)	Gas	Oil & Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Artificial Lift

4. The following are attached. (Please mark YES or NO)

- Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
- Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- Yes c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.
- Yes d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Humble Oil and Refining Company - Box 3082, Durango, Colorado

Kern County Land Company - Box 1784, Albuquerque, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO ☐ . If answer is yes, give date of such notification December 6, 1962 .

CERTIFICATE: I, the undersigned, state that I am the Asst. District Supt. of the Continental Oil Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

\* Both zones are in the Pennsylvanian Formation.

*LE Jensen*

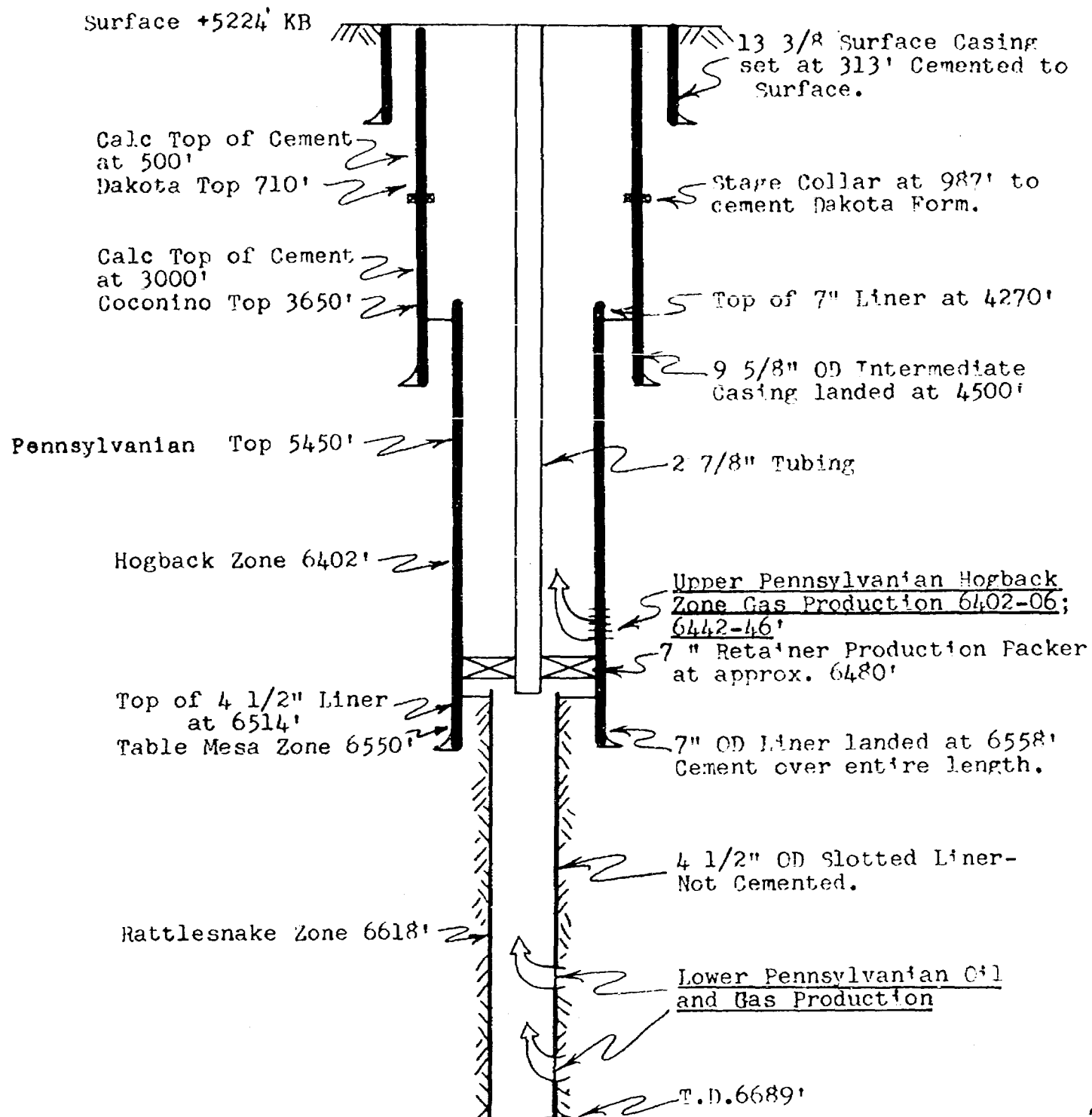
Signature

\* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

CONTINENTAL OIL COMPANY  
Proposed Dual Completion  
of  
RATTLESNAKE WELL #144  
SE-SW, Sec. 2, T29N, R19W  
San Juan Co., New Mexico  
Oil Production from Lower Pennsylvanian  
Gas Production from Upper Pennsylvanian

Case 3726





## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
December 6, 1962

Mr. A. L. Porter, Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Mr. Porter:

Enclosed is an application requesting administrative approval to dually complete an existing Pennsylvanian well at the Rattlesnake Field, San Juan County, New Mexico. Both the Lower oil zone, and the Upper gas zone are in the Pennsylvanian formation. The Lower zone will be produced through 2 7/8" tubing by artificial lift, and the Upper gas zone will be produced through the casing-tubing annulus. The two zones will be isolated by means of a permanent type production packer.

Yours very truly,



R. E. Jensen  
Assistant District Superintendent  
Durango District  
Production Department

GAB/cb

Attachments

cc: Mr. R. E. White, Continental Oil Company, Denver, Colorado (3)  
NMOCC-Aztec (2)

DOCKET MAILED

Date 12/21/62

## NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

Case 2726  
7-3-58

## APPLICATION FOR DUAL COMPLETION

Field Name Rattlesnake Pennsylvanian		County San Juan	Date 12-6-62
Operator Continental Oil Company		Lease Rattlesnake	Well No. 144
Location of Well	Unit N	Section 2	Township 29N
			Range 19W

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X

2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone (Gas)	Lower Zone (Oil & Gas)
a. Name of reservoir		
b. Top and Bottom of Pay Section (Perforations)	6402'-6406' 6442'-6446'	6689'-6567'
c. Type of production (Oil or Gas)	Gas	Oil & Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Artificial Lift

4. The following are attached. (Please mark YES or NO)

Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

Yes c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.\*

Yes d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Humble Oil and Refining Company - Box 3082, Durango, Colorado

Kern County Land Company - Box 1784, Albuquerque, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO \_\_\_\_\_. If answer is yes, give date of such notification December 6, 1962.

CERTIFICATE: I, the undersigned, state that I am the Asst. District Supt. of the Continental Oil Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

\* Both zones are in the Pennsylvanian Formation.

EE Jensen  
Signature

\* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

TE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Case 2726

## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
December 6, 1962

Humble Oil and Refining Company  
P. O. Box 3082  
Durango, Colorado

Gentlemen:

In accordance with New Mexico Oil Conservation Commission Rule 112-A (IV-C), a copy of the application for Continental Oil Company to finally complete an existing well in the Rattlesnake Field, San Juan County, New Mexico, is hereby submitted to all offset operators.

Yours very truly,

ORIGINAL SIGNED BY  
R. E. JENSEN  
R. E. Jensen  
Assistant District Superintendent  
Durango District  
Production Department

GAB/cb

Attachment

cc: New Mexico Oil Conservation Commission, Aztec, New Mexico  
New Mexico Oil Conservation Commission, Santa Fe, New Mexico



Case 2726

## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
December 6, 1962

Kern County Land Company  
P. O. Box 1784  
Albuquerque, New Mexico

Gentlemen:

In accordance with New Mexico Oil Conservation Commission Rule 112-A (IV-C), a copy of the application for Continental Oil Company to dually complete an existing well in the Rattlesnake Field, San Juan County, New Mexico, is hereby submitted to all offset operators.

Yours very truly,

ORIGINAL SIGNED BY  
R. E. JENSEN

R. E. Jensen  
Assistant District Superintendent  
Durango District  
Production Department

GAB/cb

Attachment

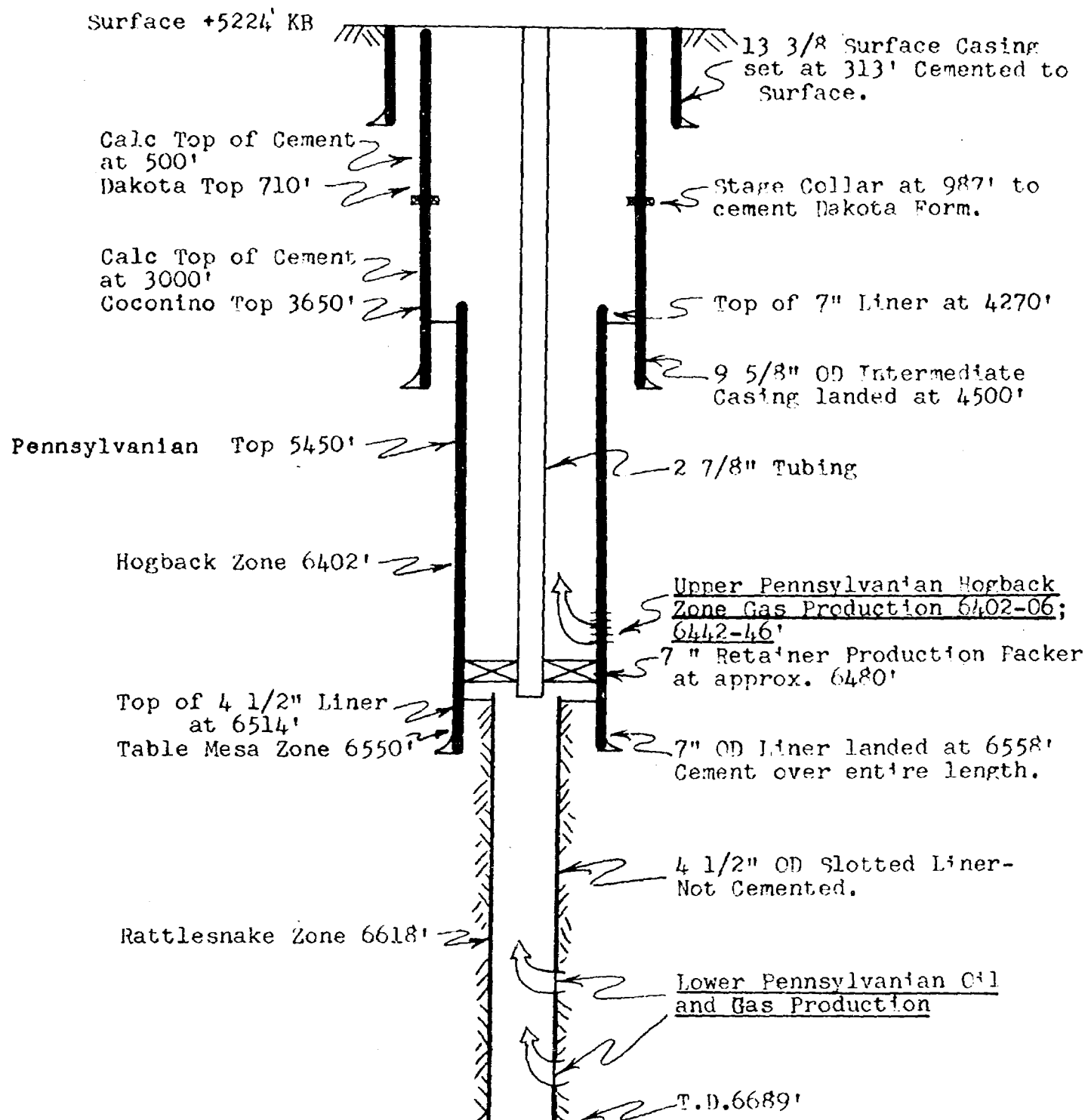
cc: New Mexico Oil Conservation Commission, Aztec, New Mexico  
New Mexico Oil Conservation Commission, Santa Fe, New Mexico ✓

CONTINENTAL OIL COMPANY  
Proposed Dual Completion

of  
RATTLESNAKE WELL #144  
SE-SW, Sec. 2, T29N, R19W  
San Juan Co., New Mexico

Oil Production from Lower Pennsylvanian  
Gas Production from Upper Pennsylvanian

*Case 2724*



No. 1-63

DOCKET: EXAMINER HEARING - THURSDAY - JANUARY 3, 1963

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, as alternate examiner:

- CASE 2724: Application of Skelly Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authorization for the dual completion (conventional) of its Dow "B" Well No. 21, located in Unit I of Section 21, Township 17 South, Range 31 East, Eddy County, New Mexico, to produce oil from the Fren and Grayburg-Jackson Pools through parallel strings of tubing.
- CASE 2725 Application of Standard Oil Company of Texas for allowable transfer, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to conduct pressure interference tests on its Jicarilla 4-26 lease, Section 26, Township 28 North, Range 1 West, Boulder-Mancos Pool, Rio Arriba County, New Mexico. Applicant proposes to shut-in Well No. 4 and produce its allowable equally from Wells Nos. 2 and 3.
- CASE 2726: Application of Continental Oil Company for a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authorization for the dual completion (conventional) of its Rattlesnake Well No. 144, located in Unit N, Section 2, Township 29 North, Range 19 West, as a dual completion (conventional) to produce gas from the Upper Pennsylvanian formation and oil from the Lower Pennsylvanian formation, Rattlesnake Pennsylvanian Field, San Juan County, New Mexico.
- CASE 2727: Application of Continental Oil Company to establish special rules and regulations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of special rules and regulations for the Oil Center-Blinebry Pool in Township 21 South, Range 36 East, Lea County, New Mexico, including a provision for 80-acre spacing units.
- CASE 2728: Application of Continental Oil Company for commingling authority, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle the production from the Drinkard, Tubb and Wantz Abo Oil Pools on its J. H. Nolan lease with Blinebry Gas Pool liquids pro-

-2-

Docket No. 1-63

duced on its J. H. Nolan Unit, Section 11, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 2729:

Application of Scanlon-Shepard for a waterflood project, Chaco Wash Oil Pool, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject water into the Mesaverde formation through certain wells in Sections 21, 22, 27 and 28, Township 20 North, Range 9 West, McKinley County, New Mexico.

CASE 2716:

(Continued)

Application of Markham, Cone & Redfern for a multiple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing the multiple completion of its Eubanks Well No. 3, located in Unit K, Section 14, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce a limited amount of gas from the Blinebry Gas Pool, oil from the Blinebry Oil Pool and oil from each of two pays in the Drinkard Pool. Separation of the four zones would be achieved by means of three packers.

iqg/

GOVERNOR  
EDWIN L. MECHEM  
CHAIRMAN

State of New Mexico  
Oil Conservation Commission

LAND COMMISSIONER  
E. S. JOHNNY WALKER  
MEMBER



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

P. O. BOX 871  
SANTA FE  
January 16, 1963

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Box 1713  
Santa Fe, New Mexico

Re: Case No. 2726 and 2727  
Order No. R-2407 and R-2408  
Applicant:  
Continental Oil Company

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

lr/

Carbon copy of order also sent to:

Hobbs OCC     X    

Artesia OCC           

Aztec OCC     X    

OTHER            Case 2727 - Mr. W. D. Girard

                     Mr. Bill Kastler and

                     Mr. Sim Christy

**Memo**

3-15-63  
From

A. R. Kendrick  
Engineer

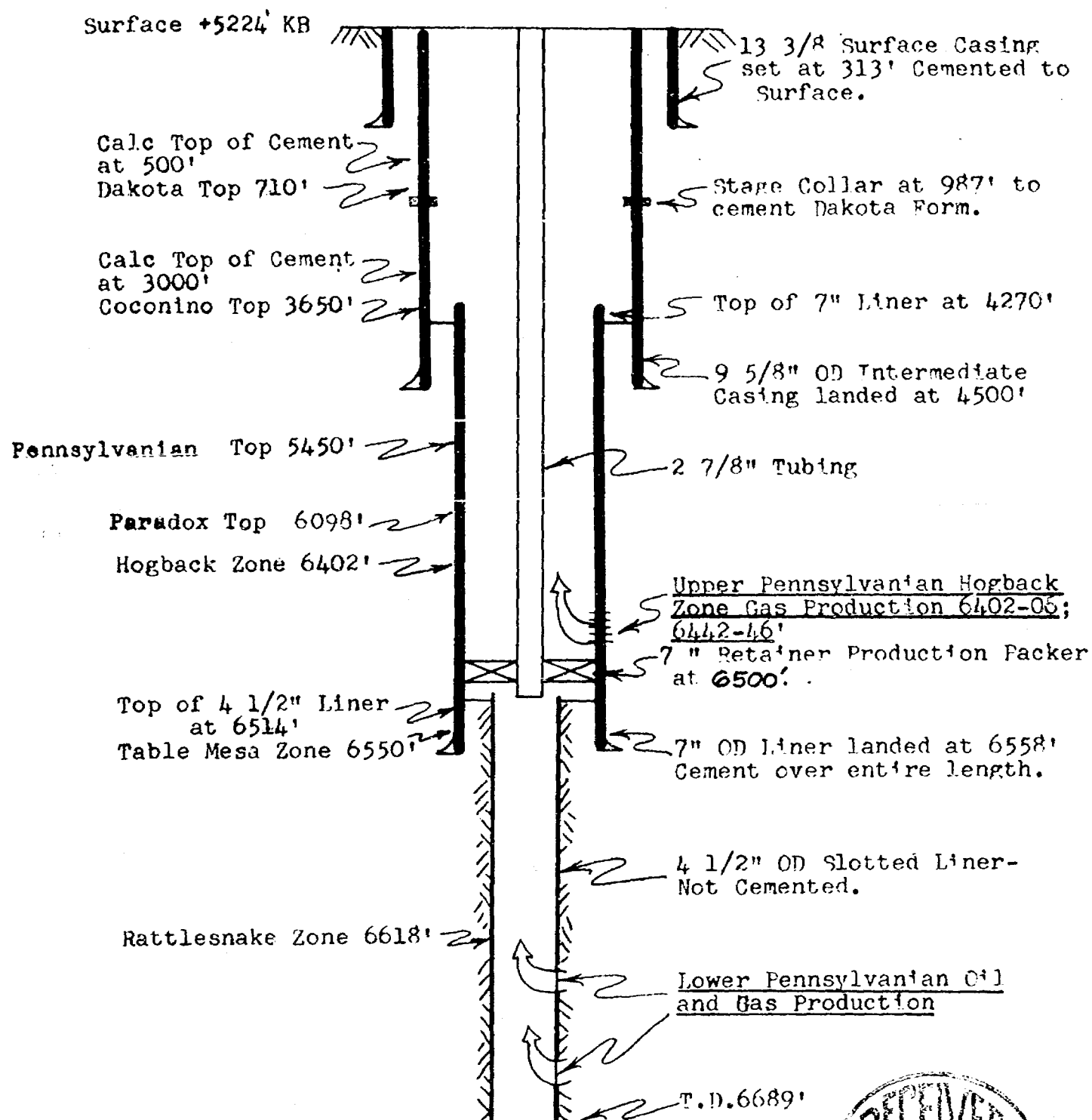
To Jim Kaptana

MAIN OFFICE 600

1963 MAR 19 AM 8:24

CONTINENTAL OIL COMPANY  
Dual Completion  
 of  
RATTLESNAKE WELL #144 (Actual Mechanical Installation)  
 SE-SW, Sec. 2, T29N, R19W  
 San Juan Co., New Mexico  
 Oil Production from Lower Pennsylvanian  
 Gas Production from Upper Pennsylvanian

*Case 7726*



STATE OF NEW MEXICO  
COUNTY OF SAN JUAN

I, W.A. Shelton, being first duly sworn upon  
my oath depose and say as follows:

I am an employee of Baker Oil Tools, Inc., and that on Feb. 21,  
1963, I was called to the location of the Continental Oil Company  
(Name of Company)

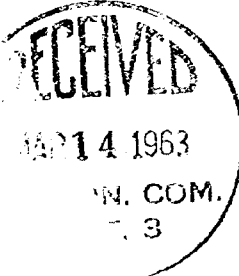
Rattle Snake # 114 Well located in the SW/4  
(Well Number)  
of Section 2, Township 29N, Range 19W, N.M.P.M., for  
advisory service in connection with installation of a production packer. In  
my presence, a Baker Model "D" Production Packer was set in this well  
at 6500 feet in accordance with the usual practices and customs of  
the industry.

W.A. Shelton

W.A. Shelton

Subscribed and sworn to before me, a Notary Public in and for San Juan  
County, New Mexico, the 24 day of March, 19 63

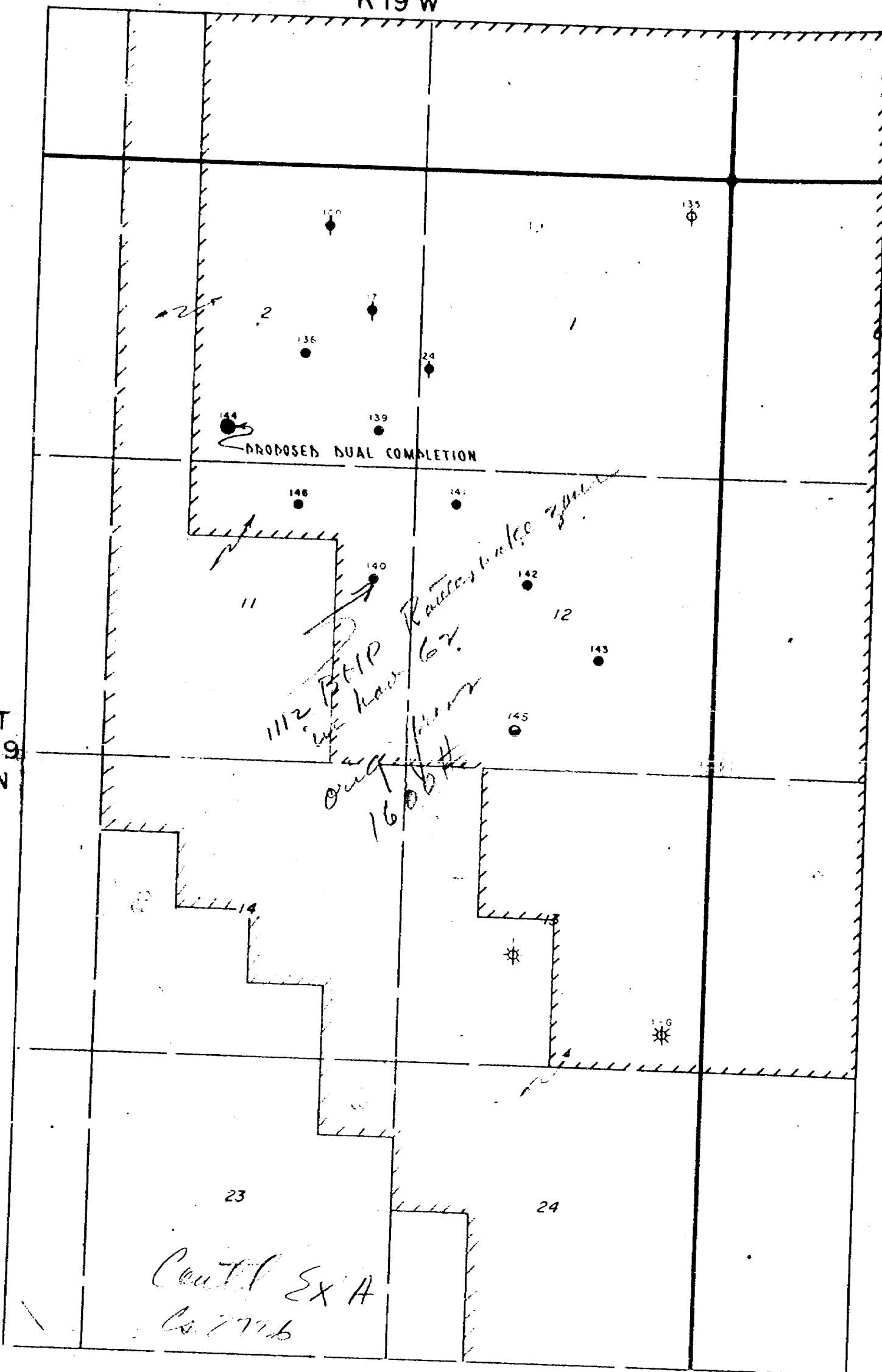
Anthony Russell James  
Notary Public in and for San Juan County, New Mexico





R 19 W

T  
29  
N



CONTINENTAL OIL CO.  
RATTLESNAKE FIELD

SAN JUAN CO., N. M.

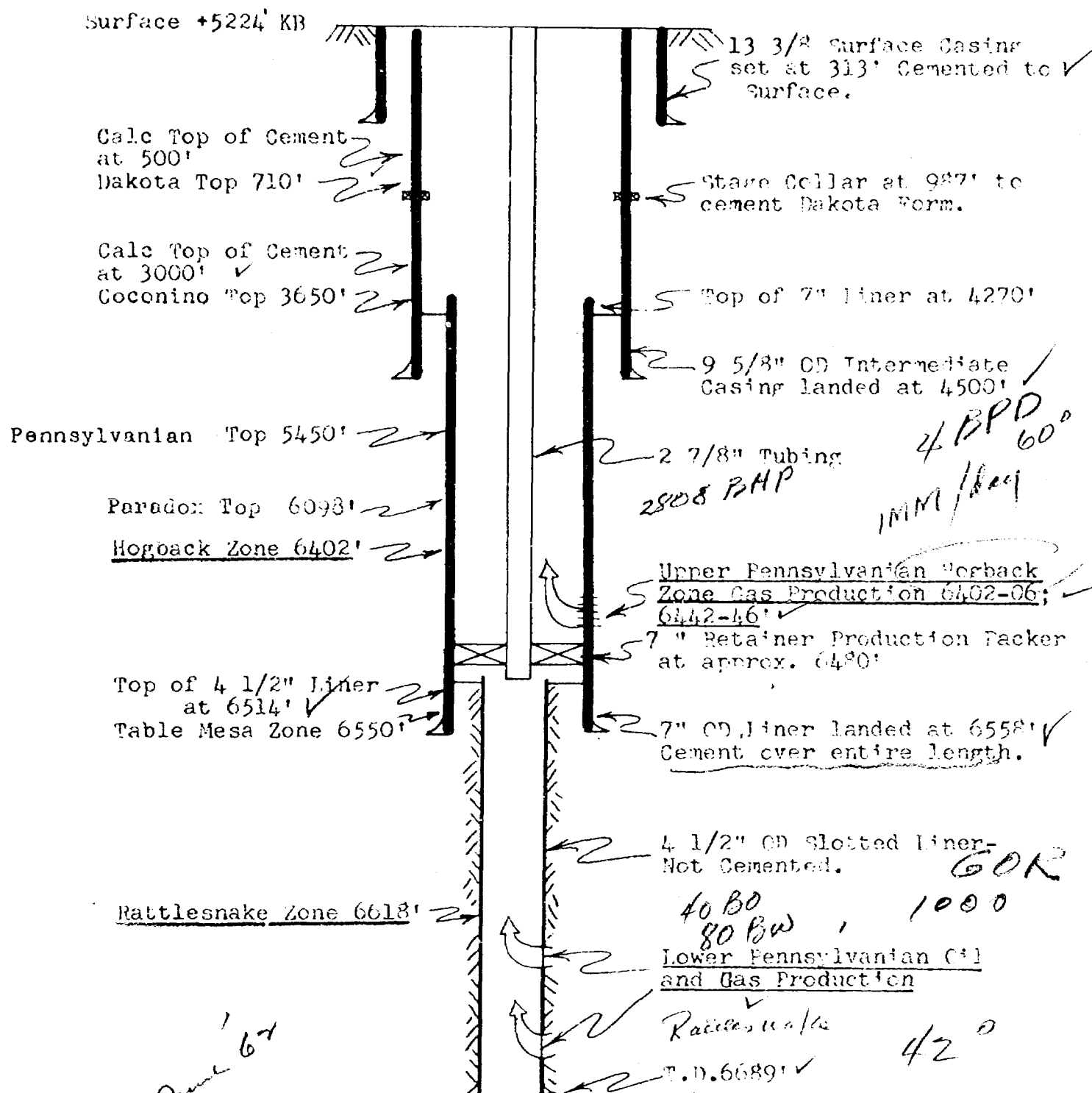
Scale: 1" = 2000'

Exhibit A

CONTINENTAL OIL COMPANY  
Proposed Dual Completion

of  
RATTLESNAKE WELL #100  
SE-SW, Sec. 2, T29N, R10W  
San Juan Co., New Mexico  
Oil Production from Lower Pennsylvanian  
Gas Production from Upper Pennsylvanian

Surface +5224' KB



air let to 6689  
dred June 67

Exhibit B

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

EXAMINER HEARING

IN THE MATTER OF:

)CASE 2726

Applicant, in the above-styled cause, seeks authorization for the dual completion (conventional) of its Rattlesnake Well No. 144, located in Unit N, Section 2, Township 29 North, Range 19 West, as a dual completion (conventional) to produce gas from the Upper Pennsylvanian formation and oil from the Lower Pennsylvanian formation, Rattlesnake Pennsylvanian Field, San Juan County, New Mexico.

BEFORE: Daniel S. Nutter, Examiner

## TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: Call Case 2726.

MR. DURRETT: Application of Continental Oil Company  
for a dual completion, San Juan County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, appearing for the Applicant, in association with Mr. Gordon Mayberry, a member of the Colorado Bar. Mr. Mayberry will present the case.

MR. MAYBERRY: If the Commission please, this is the application of Continental authorizing dual completion of its Rattlesnake Well No. 144 located in Unit N, Section 2, Township 29 North, Range 19 West, San Juan County, New Mexico. If approved,



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3571

ALBUQUERQUE, N. M.  
PHONE 243-6691

such dually completed well will produce from two common sources of supply; gas only from the Hogback zone of the Pennsylvanian, and oil and gas from the Rattlesnake zone of the Pennsylvanian in the Rattlesnake Field.

We have one witness, Mr. Fred Van Matre, and ask that he be sworn at this time.

(Witness sworn.)

FRED VAN MATRE

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. MAYBERRY:

Q Will you please state your name?

A Fred Van Matre.

Q How do you spell your last name?

A V-a-n M-a-t-r-e.

Q Where do you reside?

A Durango, Colorado.

Q What is your occupation?

A Petroleum Engineer, Continental Oil Company.

Q Have you previously testified before this Commission?

A No.

Q Would you briefly state the extent of your education and experience as a petroleum engineer?

A I graduated in 1956 from Colorado School of Mines with



a Bachelor of Science Degree in Petroleum Engineering. Since this time I have been employed by Continental Oil Company in primary and secondary oil recovery operations, and work in natural gas and gasoline plants.

MR. MAYBERRY: We will offer Mr. Van Matre as an expert Petroleum Engineer.

MR. NUTTER: Mr. Van Matre is qualified as an expert.

Q (By Mr. Mayberry) Are you familiar with the Rattlesnake Field in San Juan County, New Mexico?

A Yes, I am.

Q I'm going to hand you what has been marked here as Exhibits A, B and C.

(Whereupon, Applicant's Exhibits Nos. A, B, and C marked for identification.)

Q I'm referring to what has been marked as Exhibit A and ask you to state what that is, please.

A Exhibit A is a plat showing the location of the wells that have been penetrated in the Pennsylvanian in the Rattlesnake Field, San Juan County, New Mexico.

Q Do you accept this Exhibit A as an accurate portrayal of those locations?

A Yes, I do.

Q Referring to Exhibit B, will you state what that is?

A Exhibit B is a schematic diagram of the proposed dual completion of Rattlesnake Well No. 144 that we are seeking in this



hearing.

Q Was Exhibit B prepared by you or under your supervision?

A Yes, it was.

Q Now referring to Exhibit C, will you please state what that is?

A Exhibit C is a gamma ray neutron log of the Rattlesnake well, Well No. 144, from a depth of 4500 feet to total depth of 6689.

Q Does that log have reflected on there your interpretation as to tops of the various zones in Well No. 144?

A Yes, it does.

MR. MAYBERRY: We'll offer Exhibits A, B, and C at the present time.

MR. NUTTER: Is the witness going to discuss these exhibits a little further?

MR. MAYBERRY: Well, we will go into them further. Are those accepted?

MR. NUTTER: We'll wait and see what he has to say about them.

MR. MAYBERRY: Fine.

Q (By Mr. Mayberry) Now referring to Exhibit B, will you please describe the manner in which the Well No. 144 was drilled and completed?

A Rattlesnake 144 was drilled and completed June, 1962;



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

PAGE 6

the hole was drilled from surface to total depth of 6689. We set 313 feet of 13-3/8ths surface casing. The hole was then air drilled to 4500 feet and intermediate string of 9-5/8ths was set from surface to 4500 feet. We cemented out the shoe in the 9-5/8ths to 3,000 feet from surface. A stage collar was run in the 9-5/8ths at 987 feet, and we cemented the stage collar to 500 feet from surface, and this was to protect the Dakota formation which is productive in the area. We then drilled to 6558 feet with air, and while drilling the Hogback zone, we encountered a gas flow that was measured to be a million feet a day. At this time at 6558, a liner was run from 4270, hung in the 9-5/8ths to 6558 feet, and was cemented the entire length of the liner.

The gas that was encountered in the Hogback zone, at that particular time we encountered gas there, we had no market available so the well was drilled to TD of 6689 to the original objective horizon, which was the Rattlesnake zone, and a 4-1/2 inch liner was then run from TD of 6689 to 6514. The well was then placed on pump from the Rattlesnake zone and was capable of making 40 barrels of oil a day, 80 barrels of water a day, and 40 MCF of gas per day.

Q And the well was then completed initially in the Rattlesnake zone?

A That is correct.

Q Referring to Exhibit A, the Well No. 144 to which you have just referred, is that marked in red on Exhibit A?



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

PAGE 7

A Yes, it is.

Q Is it your opinion that the Hogback and Rattlesnake zones are separate and common sources of supply in the Pennsylvanian in Well No. 144?

A Yes, I do think so. At the present time the Rattlesnake zone is shut-in and we have set a Baker Model "C" retrievable type bridge plug below the Hogback zone, which has been perforated from 6402 to 6406, and 6442 to 6446. A Baker Model "R" Packer has been set on tubing above the Hogback perforations. We have tested the Hogback zone and it is capable of making an open flow potential of a million feet a day. We have obtained bottom hole pressure information on this zone, and the original reservoir pressure obtained with the pressure bomb was 2808 pounds.

MR. NUTTER: 2808?

A Yes, sir. The Rattlesnake zone, which, of course, was the original producing zone, we have observed the pressure in the Rattlesnake zone throughout the field. If you will note on Exhibit A, Well No. 140 was completed in the Rattlesnake zone and has been a pressure observation well. On November 14th of 1962, the pressure was measured in the Rattlesnake zone and it was 1112 pounds. The original pressure in this reservoir was 1600 pounds in the Rattlesnake zone.

Q In your opinion, from the testimony that you have just given, this differential in pressures between the Rattlesnake and Hogback zones reflects the separateness and isolation of these





two pools, isn't that correct?

A Yes, sir. The difference in pressures plus the fact, the information we have on core analysis shows that these two zones are separated by shale barriers, and we do not believe they are in communication, with this impervious shale, plus the pressure information we have which shows that the Rattlesnake zone will produce oil and associated gas, while the Hogback zone is primarily a dry gas zone.

Q Is this same conclusion further verified by Exhibit C, the gamma ray neutron log?

A Yes. In correlating the log throughout the area with our core analysis, shale barriers are predominant throughout the area, and we can correlate it.

Q Will you describe the manner in which you propose to dually complete this well?

A We plan to pull the Baker "C" bridge plug that is in the hole now in the Baker Model "R" Packer. A Baker permanent type production packer would be set in the 7-inch pipe at approximately 6480 feet. That would be above the Rattlesnake zone and below the Hogback zone. Oil would be produced from the Rattlesnake zone through tubing with conventional pumping equipment, and the Hogback gas zone would be flowed between the tubing casing annulus.

Q At the present time, are you producing from the Rattlesnake or Hogback zone?

A From the Hogback zone.



Q Did you obtain permission for seating the retrievable plug from the Aztec office of the Commission?

A Yes, we did. We talked to them on the phone and had clearance to make this temporary setup.

Q Is it your opinion that the procedure which you have just described as to the method of dually completing this well, that this will prevent communication between the two common sources of supply?

A Yes, I do, and this will be verified by the packer leakage tests.

MR. MAYBERRY: We will offer Exhibits A through C.

MR. NUTTER: Continental Exhibits A through C will be admitted in evidence.

(Whereupon, Applicant's Exhibits A, B, and C admitted in evidence.)

MR. MAYBERRY: We have no further questions.

MR. NUTTER: Does anyone have any questions?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Van Matre, you presently do have a market for the Hogback gas?

A Yes.

Q What was your GOR in the Rattlesnake zone?

A 1,000. The well is currently capable of making 25 barrels of oil and --

Q What is the gravity?



Q Did you obtain permission for seating the retrievable plug from the Aztec office of the Commission?

A Yes, we did. We talked to them on the phone and had clearance to make this temporary setup.

Q Is it your opinion that the procedure which you have just described as to the method of dually completing this well, that this will prevent communication between the two common sources of supply?

A Yes, I do, and this will be verified by the packer leakage tests.

MR. MAYBERRY: We will offer Exhibits A through C.

MR. NUTTER: Continental Exhibits A through C will be admitted in evidence.

(Whereupon, Applicant's Exhibits  
A, B, and C admitted in evidence.)

MR. MAYBERRY: We have no further questions.

MR. NUTTER: Does anyone have any questions?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Van Matre, you presently do have a market for the Hogback gas?

A Yes.

Q What was your GOR in the Rattlesnake zone?

A 1,000. The well is currently capable of making 25 barrels of oil and --

Q What is the gravity?



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

A 42.

Q How about liquids?

A At a million feet a day, when we tested the well it made four barrels of condensate.

Q What is the gravity?

A I don't remember.

Q Is it a high density condensate?

A Yes, I would say about 60.

MR. NUTTER: Anything further of Mr. Van Matre? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Mayberry?

MR. MAYBERRY: No.

MR. NUTTER: Does anyone have anything else? We will take the case under advisement.

\* \* \* \*



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 21st day of January, 1963.

*Ada Dearnley*  
NOTARY PUBLIC

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2726 heard by me on 1/3, 1963.

*[Signature]*, Examiner  
New Mexico Oil Conservation Commission

