

**CASE 2829: Application of AMERADA
for the dual completion of its
S. E. ANDERSON WELL NO. 1.**

2829

tion, Transcript.

Exhib. Etc.

DRAFT

JMD/esr
June 11, 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. 2829

Order No. R- 2506

APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR A DUAL COMPLETION,
AND FOR COMMINGLING AUTHORITY, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
June 5, 1963, at Santa Fe, New Mexico, before Elvis A. Utz,
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 June, 1963, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner,
Elvis A. Utz, 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, Amerada Petroleum Corporation,
seeks authority to complete its S. E. Anderson Well No. 1,
located in Unit B of Section 30, Township 9 South, Range 35
East, NMPM, Lea County, New Mexico, as a dual completion (con-
ventional) to produce oil from the Bough " zone of the
Pennsylvanian formation and from the Devonian formation through
parallel strings of 2 3/8-inch tubing, with separation of zones
by packers set at approximately ~~9600~~ feet and 9790 feet.

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

(4) That approval of the proposed dual completion will
prevent waste and protect correlative rights.

(5) That the applicant also seeks authority to commingle the production from ~~the proposed dual completion on~~ its S. E. Anderson lease comprising the N/2, N/2 SE/4, and SW/4 SE/4 of Section 30, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico.

(6) That the applicant proposes to meter and sample the Bough "C" production prior to commingling and to comply with the requirements of Part II, Section 2-B of the Commission "Manual for the Installation and Operation of Commingling Facilities."

(7) That approval of the proposed commingling will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to complete its S. E. Anderson Well No. 1, located in Unit B of Section 30, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bough "C" zone of the Pennsylvanian formation and from the Devonian formation through parallel strings of 2 3/8-inch tubing, with separation of zones by packers set at approximately ~~9697 feet and~~ 9790 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 Devonian formation.

(2) That the applicant is hereby authorized to commingle the Bough "C" and Devonian production from its ~~S. E. Anderson Well No. 1, located 660 feet from the North line and 1980 feet from the East line of Section 30, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, on its~~ S. E. Anderson Lease comprising the N/2, N/2 SE/4, and SW/4 SE/4 of said Section 30, *Township 9 South, Range 35 East, Lea County, New Mexico.*

PROVIDED HOWEVER, That the Bough "C" production shall be metered and sampled prior to ~~commingling~~ ^{Commingle} and the applicant shall fully comply with all of the requirements of ~~Section II, Part~~ ^{Part Section} 2-B of the Commission "Manual for the Installation and Operation of Commingling Facilities."

(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 herein-above designated.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 5, 1963

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

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

- CASE 2816: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit C. T. Robertson and all other interested parties to appear and show cause why the Honolulu State "B" Wells Nos. 4 and 5 in Units G and H, respectively, of Section 11, Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2827: Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 17 located in Unit N of Section 36, Township 17 South, Range 34 East, Vacuum Field, Lea County, New Mexico, to produce oil from the Wolfcamp and the Pennsylvanian formations through parallel strings of 2 7/8 inch casing and from the Devonian formation through 1 1/4 inch tubing installed within 3 1/4 inch casing, all casing strings to be cemented in a common well bore.
- CASE 2828: Application of Continental Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Warren Unit Well No. 26, located in Unit M of Section 27, Township 20 South, Range 38 East, Lea County, New Mexico, to produce gas from the Warren Blinberry Gas Pool and from the Warren-Tubb Gas Pool and oil from the Warren-Drinkard Pool through parallel strings of tubing.
- CASE 2829: Application of Amerada Petroleum Corporation for a dual completion, and for commingling authority, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its S. E. Anderson Well No. 1, located in Unit B of Section 30, Township 9 South, Range 35 East, Lea County, New Mexico, to produce oil from the Bough "C" zone of the Pennsylvanian formation and from the Devonian formation through parallel strings of tubing. Applicant further seeks authority to commingle said pools on said lease by use of the subtraction method.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 5, 1963

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- CASE 2816: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit C. T. Robertson and all other interested parties to appear and show cause why the Honolulu State "B" Wells Nos. 4 and 5 in Units G and H, respectively, of Section 11, Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2827: Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 17 located in Unit N of Section 36, Township 17 South, Range 34 East, Vacuum Field, Lea County, New Mexico, to produce oil from the Wolfcamp and the Pennsylvanian formations through parallel strings of 2 $\frac{7}{8}$ inch casing and from the Devonian formation through 1 $\frac{1}{2}$ inch tubing installed within 3 $\frac{1}{4}$ inch casing, all casing strings to be cemented in a common well bore.
- CASE 2828: Application of Continental Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Warren Unit Well No. 26, located in Unit M of Section 27, Township 20 South, Range 38 East, Lea County, New Mexico, to produce gas from the Warren Blinbry Gas Pool and from the Warren-Tubb Gas Pool and oil from the Warren-Drinkard Pool through parallel strings of tubing.
- CASE 2829: Application of Amerada Petroleum Corporation for a dual completion, and for commingling authority, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its S. E. Anderson Well No. 1, located in Unit B of Section 30, Township 9 South, Range 35 East, Lea County, New Mexico, to produce oil from the Bough "C" zone of the Pennsylvanian formation and from the Devonian formation through parallel strings of tubing. Applicant further seeks authority to commingle said pools on said lease by use of the subtraction method.

- CASE 2830: Application of Humble Oil & Refining Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-2433, which order authorized the triple completion (tubingless), of applicant's State "S" Well No. 24 located in Unit J, Section 2, Township 22 South, Range 37 East, to produce oil from the Blinebry, Drinkard, and Abo formations through parallel strings of 2 7/8 inch casing cemented in a common well bore. Applicant now desires to substitute the Granite Wash for the Blinebry formation in said Order No. R-2433.
- CASE 2831: Application of Pan American Petroleum Corporation for an exception to Rules 15 (A) and 15 (B) of the general Rules and Regulations governing prorated gas pools in Northwestern New Mexico. Applicant, in the above-styled cause, seeks to suspend the shut-in provisions of Rules 15(A) and 15(B) of Order No. R-1670, as amended, until September 1, 1963, for the Gallegos Canyon Unit Wells No. 96, 107, 109, 110, and 111 located in Sections 18, 19 and 20, Township 29 North, Range 12 West, and the Gallegos Canyon Unit Wells No. 102, 106, and 108, located in Sections 13 and 24, Township 29 North, Range 13 West, Basin Dakota Pool, San Juan County, New Mexico.
- CASE 2554: (Reopened)
In the matter of Case 2554 being reopened pursuant to the provisions of Order No. R-2253, which order established temporary 80-acre proration units for the South Lane Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.
- CASE 2820: (Continued from the May 22, 1963 examiner hearing)
Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the NE/4 of Section 20 and the NW/4 of Section 21, Township 23-South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its State "A" A/c-1 Well No. 6, located 2310 feet from the North line and 1650 feet from the West line of said Section 21.
- CASE 2821: (Continued from the May 22, 1963 examiner hearing)
Application of D. W. Falls, Inc. for an extension of Order

No. R-2213, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the extension of Order No. R-2213, which order assigned a temporary deliverability for all available purposes to applicant's Federal Well No. 2-11, located in Unit O of Section 11, Township 28 North, Range 13 West, Basin-Dakota Gas Pool, San Juan County, New Mexico.

CASE 2824:

(Continued from the May 22, 1963 examiner hearing)
Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 14, located in Unit J of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the North Vacuum-Abo and the Vacuum-Wolfcamp Pools through parallel strings of 2 7/8 inch casing and from the Vacuum-Devonian Pool through 1 1/2 inch tubing installed within 3 1/2 inch casing, all casing strings to be cemented in a common well bore.

CASE 2826:

(Continued from the May 22, 1963 examiner hearing)

Application of Texaco Inc. for a triple completion & for certain administrative procedures, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "L" Well No. 6 located in Unit B of Section 1, Township 18 South, Range 34 East, Lea County, New Mexico, to produce oil from the Vacuum Wolfcamp Pool and an undesignated Pennsylvanian Pool through parallel strings of 2 7/8 inch casing and from the Vacuum-Devonian Pool through 1 1/2 inch tubing installed within 3 1/2 inch casing, all casing strings to be cemented in a common well bore. Applicant further seeks a procedure whereby 1 1/2 inch tubing for Devonian production in this field may be approved administratively.

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF
NEW MEXICO

THE APPLICATION OF AMERADA PETROLEUM)
CORPORATION FOR AN OIL-OIL DUAL COM-)
PLETION OF ITS S.E. ANDERSON WELL NO.)
1, LOCATED IN UNIT B OF SECTION 30,)
TOWNSHIP 9 SOUTH, RANGE 35 EAST, LEA)
COUNTY, NEW MEXICO; AND FOR ZONE COM-)
MINGLING OF PRODUCTION BY THE SUB-)
TRACTION METHOD ON ITS S.E. ANDERSON)
LEASE DESCRIBED AS THE N/2, N/2 SE/4)
AND SW/4 SE/4, SECTION 30, TOWNSHIP 9)
SOUTH, RANGE 35 EAST AND S/2 S/2,)
SECTION 19, TOWNSHIP 9 SOUTH, RANGE)
35 EAST, LEA COUNTY, NEW MEXICO.)

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CASE NO. 2829

APPLICATION

Applicant, Amerada Petroleum Corporation, states that:

1. Applicant is the operator, owner and part owner of the S.E. Anderson Lease described as the N/2, N/2 SE/4 and SW/4 SE/4, Section 30, Township 9 South, Range 35 East and S/2 S/2, Section 19, Township 9 South, Range 35 East, Lea County, New Mexico.
2. Applicant proposes the dual completion (conventional) of its S.E. Anderson Well No. 1, located in Unit B, Section 30, Township 9 South, Range 35 East, Lea County, New Mexico as an undesignated Bough "C" Oil and a undesignated Devonian Oil well through parallel strings of 2-3/8" tubing.
3. The mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
4. Applicant proposes zone commingling by the subtraction method from the Bough "C" and the Devonian on the subject lease.
5. The oil gravity of the Bough "C" is 45.3 degrees and the Devonian is 43.7 degrees and that commingling will have little or no effect on the value received from the crude.
6. The economic advantage of commingling lies in equipment installation.
7. Approval of the subject applications will neither cause waste nor impair correlative rights.
8. Copies of the Commission's Dual Completion Form, Area Plat, Commingling Installation Plat and Schematic Diagram of the proposed well installation are enclosed.

Applicant requests that these matters be set for hearing, that notice of the hearing be given as required by law, and that, under conclusion of the hearing, the Commission issue its order authorizing the above proposals.

Respectfully Submitted
AMERADA PETROLEUM CORPORATION

BY Jason W. Kellahin
KELLAHIN & FOX
P.O. Box 1713
Santa Fe, New Mexico
Attorneys for Applicant

DOCKET MAILED

272363
22

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name Undesignated		County Lea		Date May 9, 1963
Operator Amerada Petroleum Corporation		Lease S. E. Anderson		Well No. 1
Location of Well	Unit B	Section 30	Township 9 - South	Range 35 - East

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	Lower Zone
a. Name of reservoir	Undesignated Bough "C"	Undesignated Devonian
b. Top and Bottom of Pay Section (Perforations)	Top 9737' Bottom 9755'	Top 12,634' Bottom 12,638'
c. Type of production (Oil or Gas)	Oil	Oil
d. Method of Production (Flowing or Artificial Lift)	Flowing	Pump

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.
- No 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.

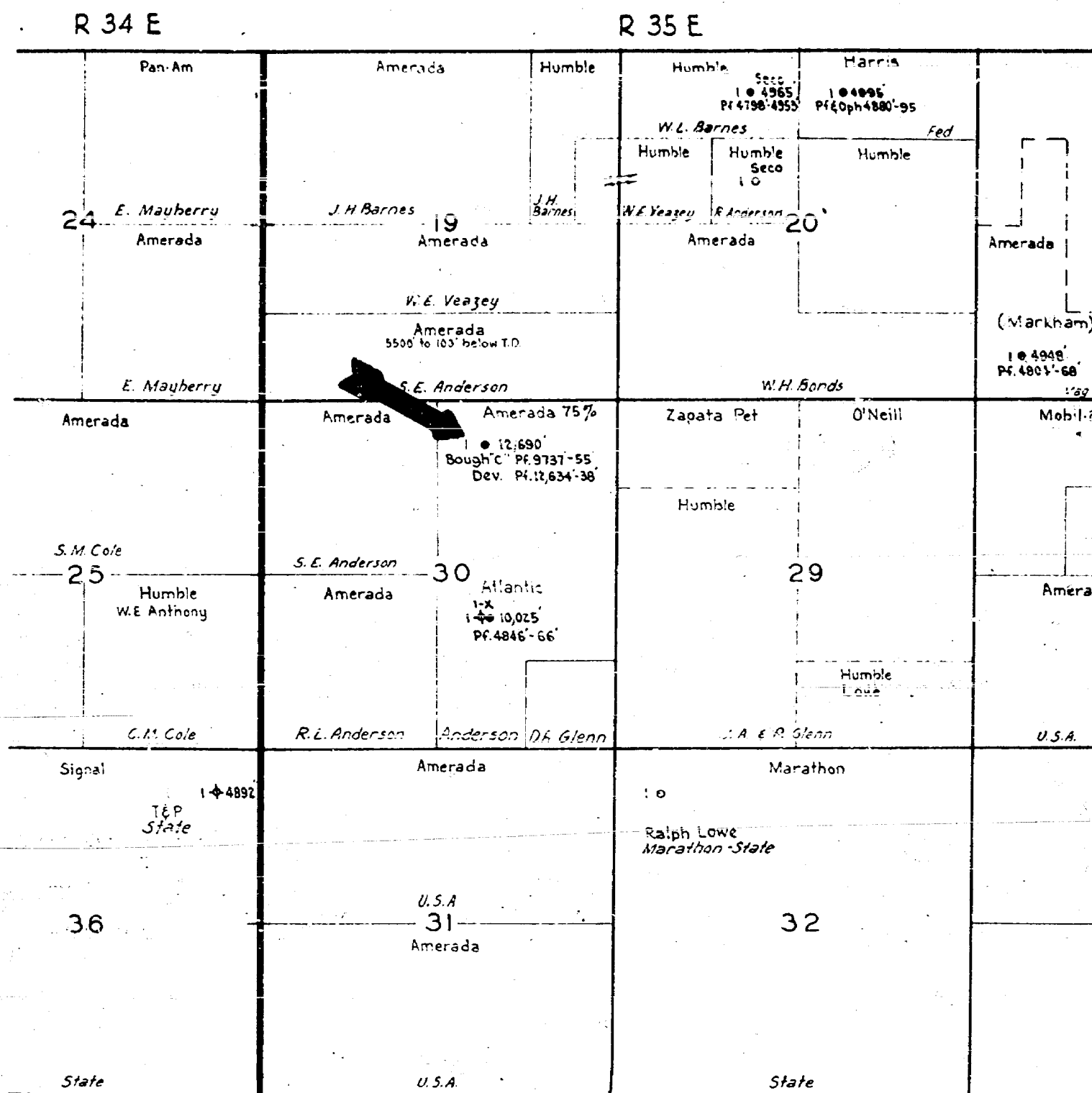
Atlantic Refining Co.	P.O. Box 1610	Midland, Texas
Humble O & R. Co.	P.O. Box 2347	Hobbs, New Mexico
Zapata Petroleum Corp.	P.O. Box 3195	Midland, Texas

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

CERTIFICATE: I, the undersigned, state that I am the District Superintendent of the Amerada Petroleum Corporation (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.

D. L. Carpenter
Signature

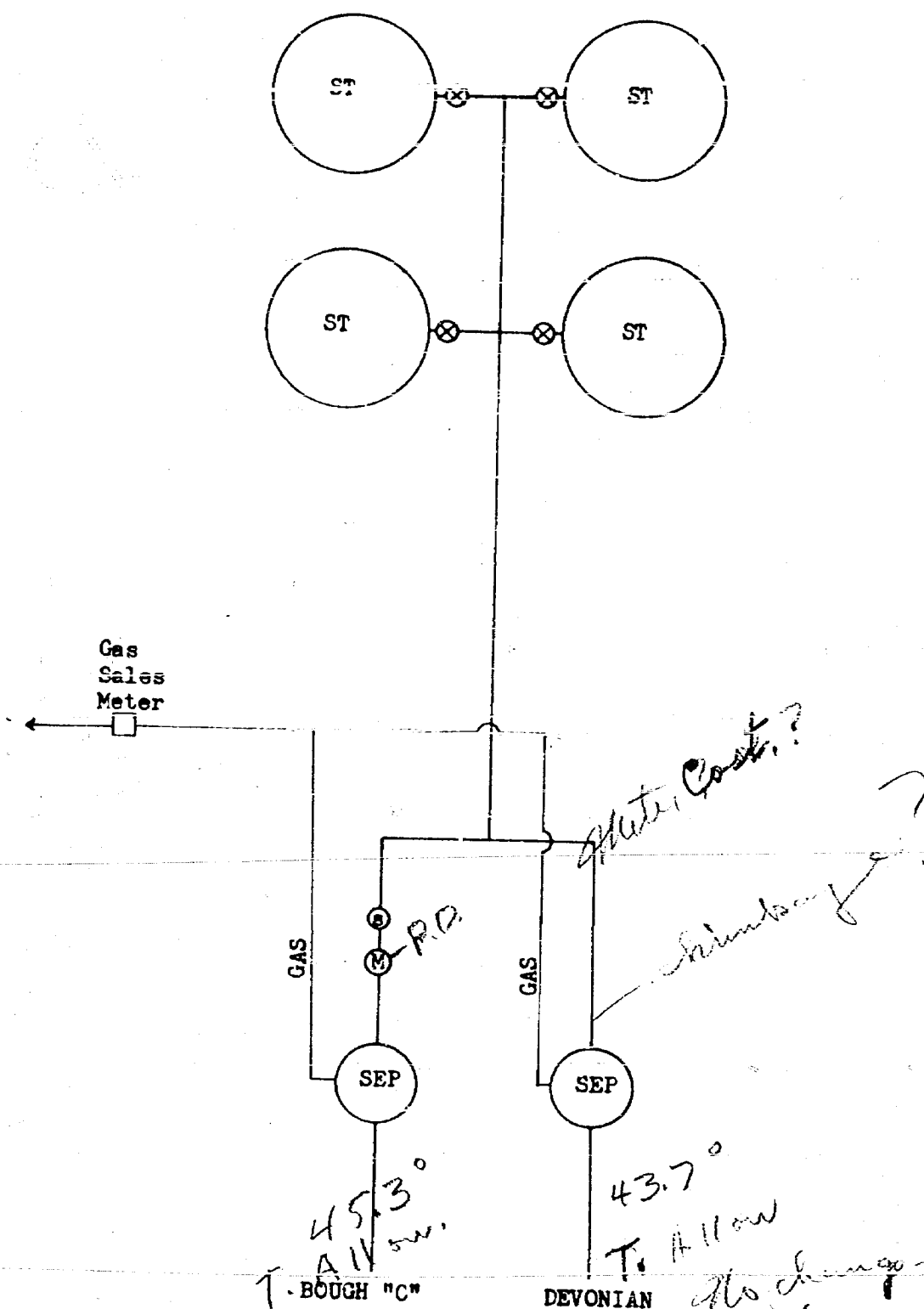
- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest 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.



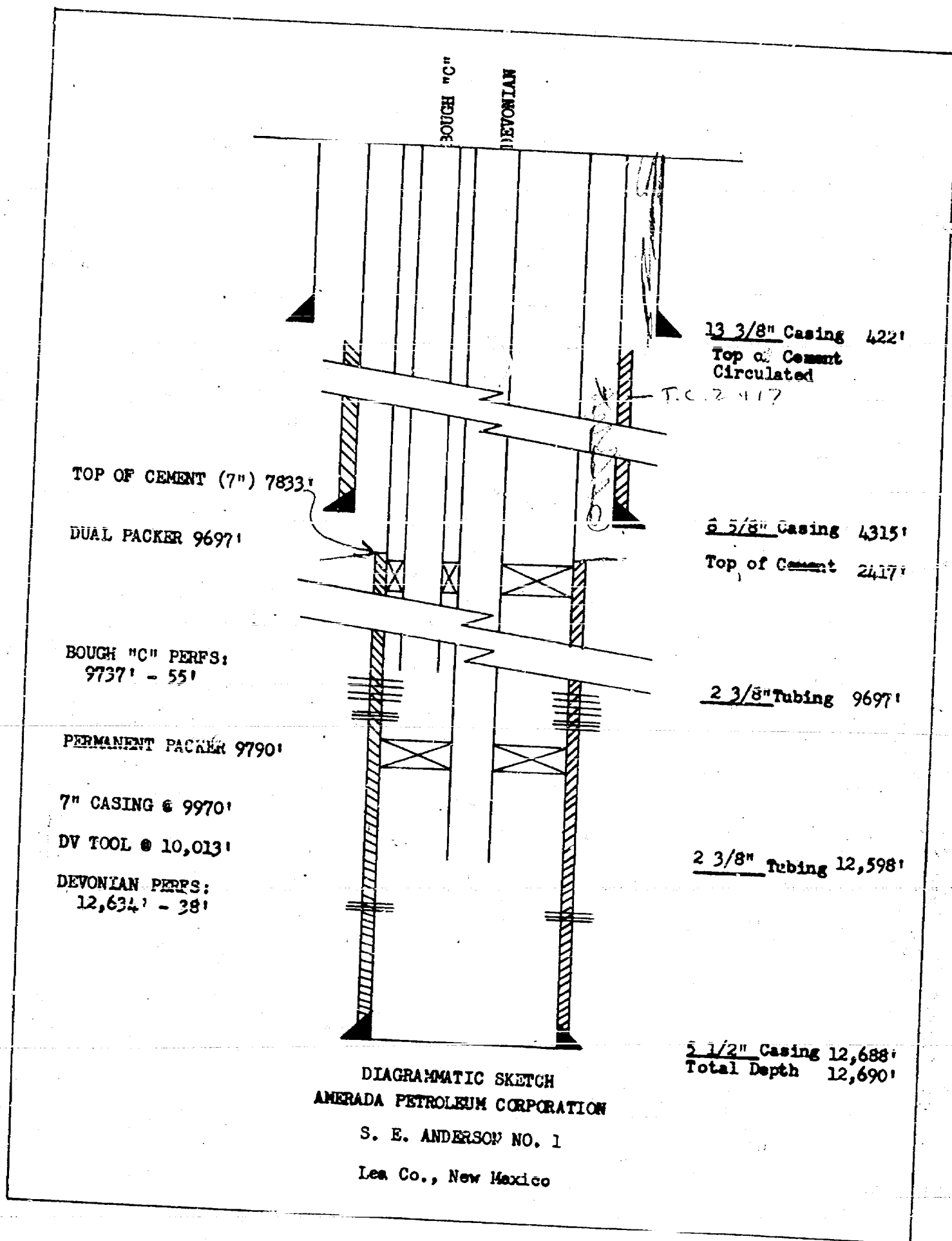
S.W. CROSSROADS AREA

LEA COUNTY, NEW MEXICO

T 9 S R 34-35 E



AMERADA PETROLEUM CORPORATION
 PROPOSED INSTALLATION FOR THE
 COMINGLING OF OIL ON
 S. E. ANDERSON LEASE



Case 2829

Heard 6-5-63

Rec. 6-7-63.

1. Grant Amerada permission to
quickly complete their Anderson #1
located 660/N, 1980/E (B) 30-95-35E in
Unders-Bouge^{er} + Undesignated-Devonian.
prob. Conventional Res.

2. Grant approval to Commingle
the Bouge^{er} with the Devonian
after the Bouge^{er} production has
been metered & sampled. All
requirements of section II, part 2-B
of the N.O.C. manual for installation
and operation of commingling facilities
shall be complied with.

Thos. A. Wf.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



EXECUTIVE COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

June 17, 1963

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

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

Re: Case No. 2829
Order No. A-2506
Applicant:
Amerasia Petroleum Corporation

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.
Secretary-Director

lr/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Astec OCC

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. 2829
Order No. R-2506

APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR A DUAL COMPLETION,
AND FOR CONNINGLING AUTHORITY, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 5, 1963, at Santa Fe, New Mexico, before Elvis A. Utz, 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 17th day of June, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Amerada Petroleum Corporation, seeks authority to complete its S. E. Anderson Well No. 1, located in Unit 2 of Section 30, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bough "C" zone of the Pennsylvanian formation and from the Devonian formation through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 9790 feet.

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

(4) That approval of the proposed dual completion will prevent waste and protect correlative rights.

-2-

CASE No. 2829

Order No. R-2506

(5) That the applicant also seeks authority to commingle the production from the S. E. Anderson Lease comprising the N/2, E/2 SE/4, and SW/4 SE/4 of Section 30, Township 9 South, Range 35 East, NMPL, Lea County, New Mexico.

(6) That the applicant proposes to meter and sample the Bough "C" production prior to commingling and to comply with the requirements of Part II, Section 2-B of the Commission "Manual for the Installation and Operation of Commingling Facilities."

(7) That approval of the proposed commingling will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Amerada Petroleum Corporation, is hereby authorized to complete its S. E. Anderson Well No. 1, located in Unit B of Section 30, Township 9 South, Range 35 East, NMPL, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bough "C" zone of the Pennsylvanian formation and from the Devonian formation through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 2790 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 Devonian formation.

(2) That the applicant is hereby authorized to commingle the Bough "C" and Devonian production from its S. E. Anderson Lease comprising the N/2, E/2 SE/4, and SW/4 SE/4 of said Section 30, Township 9 South, Range 35 East, NMPL, Lea County, New Mexico.

PROVIDED HOWEVER, That the Bough "C" production shall be metered and sampled prior to commingling and the applicant shall fully comply with all of the requirements of Part II, Section 2-B of the Commission "Manual for the Installation and Operation of Commingling Facilities."

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

-3-

CASE No. 2829
Order No. M-2506

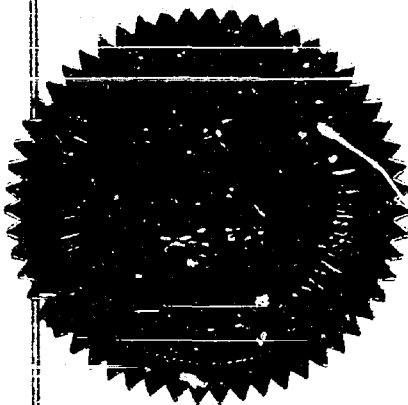
DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

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



esr/

-3-

CASE No. 2829
Order No. R-2506

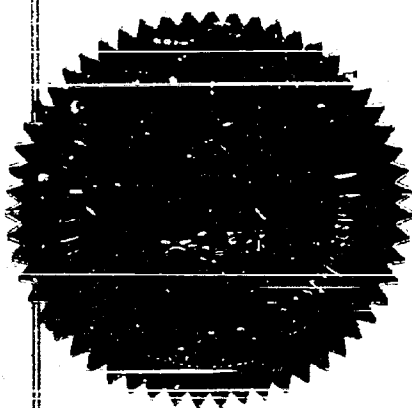
WEEK at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

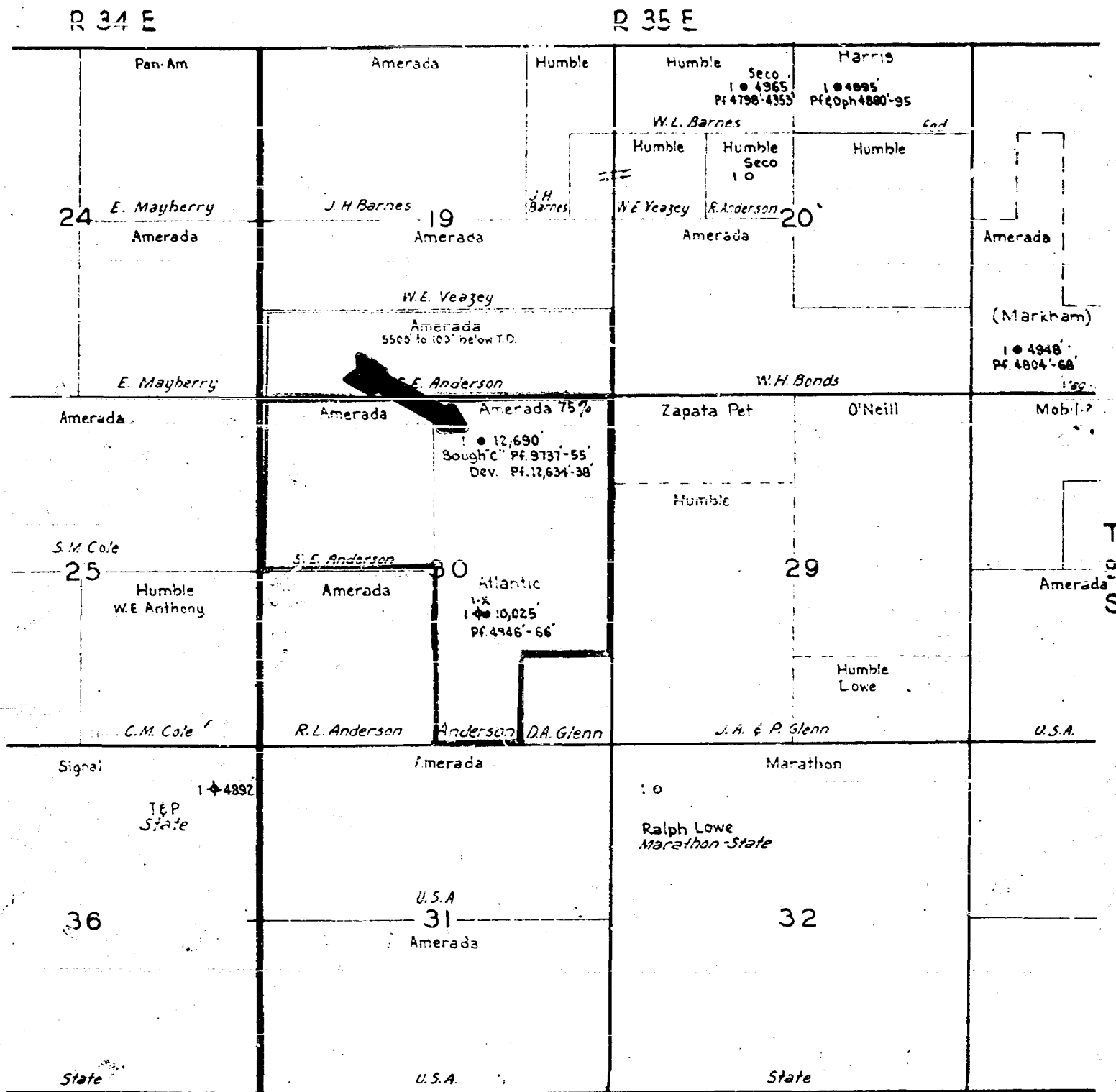
Jack M. Campbell
JACK M. CAMPBELL, Chairman

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

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

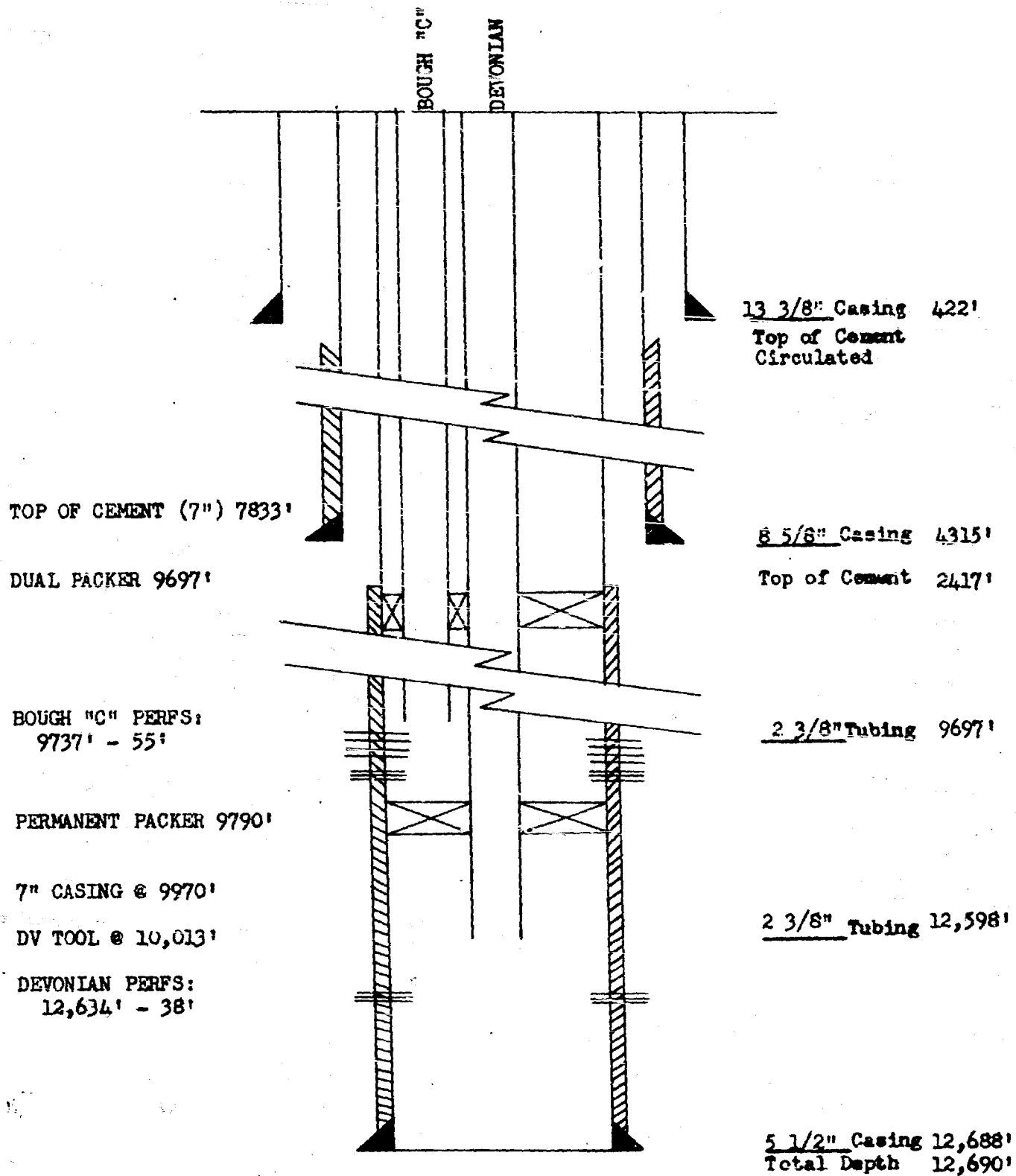


esr/



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT
NO. 2829

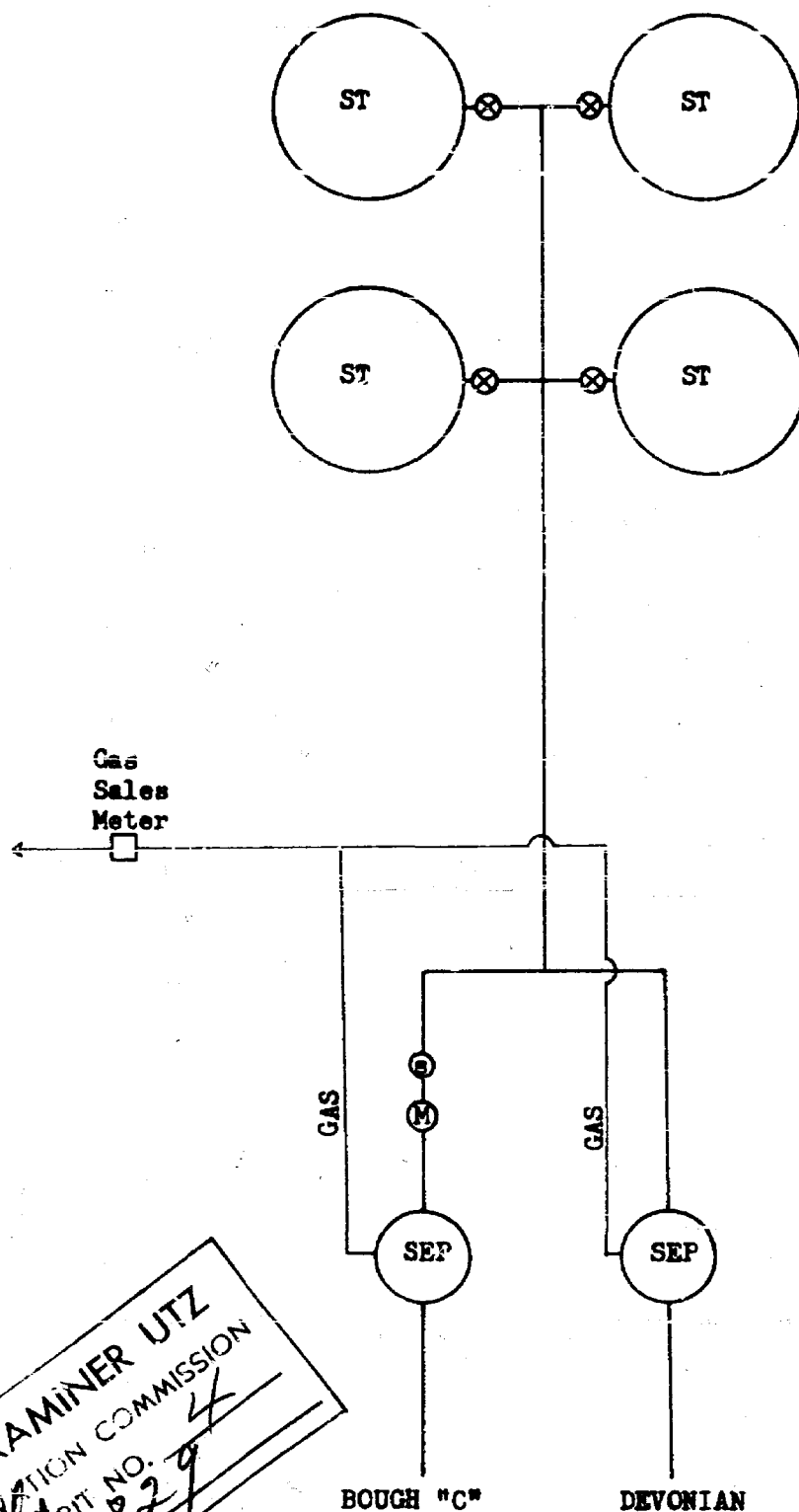
Case No. 2829 - Exhibit No. 1
W. CROSSROADS AREA
LEA COUNTY, NEW MEXICO
T 9 S R 34-35 E



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Amesbury EXHIBIT NO. 2
CASE NO. 2829

DIAGRAMMATIC SKETCH
AMERADA PETROLEUM CORPORATION
S. E. ANDERSON NO. 1
Lea Co., New Mexico

Case 2829
Exhibit No 2



BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
Amerada
 CASE NO. 2829 4

AMERADA PETROLEUM CORPORATION
 PROPOSED INSTALLATION FOR THE
 COMINGLING OF OIL ON
 S. E. ANDERSON LEASE

Case No 2829
 Exhibit No. 4

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 5, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corporation for
a dual completion, and for commingling authority,
Lea County, New Mexico. Applicant, in the above-
styled cause, seeks approval of the dual comple-
tion (conventional) of its S. E. Anderson Well
No. 1, located in Unit B of Section 30, Township
9 South, Range 35 East, Lea County, New Mexico,
to produce oil from the Bough "C" zone of the
Pennsylvanian formation and from the Devonian
formation through parallel strings of tubing.
Applicant further seeks authority to commingle
said pools on said lease by use of the subtrac-
tion method.

CASE 2829

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2829.

MR. DURRETT: Application of Amerada Petroleum Corpora-
tion for a dual completion, and for commingling authority, Lea
County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa
Fe, New Mexico, appearing on behalf of the Applicant. We will
have one witness that I would like to have sworn, please.

(Witness sworn.)

MR. UTZ: Are there other appearances in this case?

You may proceed.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 323-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691



LAWRENCE E. THOMAS

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please.

A Lawrence E. Thomas.

Q By whom are you employed and in what position, Mr. Thomas?

A Employed by Amerada Petroleum Corporation as District Engineer in Hobbs, New Mexico.

Q Have you ever testified before the Oil Conservation Commission of New Mexico?

A No, sir.

Q Would you state for the benefit of the Examiner your education and experience as a Petroleum Engineer?

A I have a B.S. in Petroleum Engineering from Texas Technological College.

Q When did you get that degree?

A 1951. And have been employed by Amerada as a Petroleum Engineer since that date. I have been District Engineer in three different districts since 1958.

Q How long have you been in your present position?

A In the present position since February of this year.

Q Does the area involved in the application fall under your jurisdiction?

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A It does.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Kellahin) Mr. Thomas, are you familiar with the application of Amerada Petroleum Corporation in the Case 2829?

A I am.

Q Would you state briefly what's proposed by Amerada in this application?

A We propose to dual complete the Bough "C" and Devonian zones and commingle the production on the lease.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 marked for identification.)

Q Referring to what has been marked as Exhibit No. 1, will you identify that exhibit, please, and state what's shown thereon?

A Exhibit No. 1 is a plat showing the location of the well in the proposed application. It also shows, outlined in red is the lease applied for commingling. I would like to point out at this time that in the application the South Half of the South Half of Section 19, Range 35 East, Township 9 South, was included in this, but since that time working interest ownership has been changed and we wish to only include as the lease the North Half, and the North Half of the Southeast Quarter, and Southwest Quarter of the Southeast Quarter of Section 30, Township 9 South, Range 35 East as the lease for commingling.



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Q Is that the area that's outlined in red on Exhibit No. 1?

A That is correct. The deleted section is outlined in green. The location of the well for dual proposal is located in Unit B, Section 30, Township 9 South, Range 35 East.

Q Could you give the exact location of the well, the footage location?

A That is 1980 feet from the East line and 660 feet from the North line of Section 30.

Q Is all of the working interest ownership common throughout in the area involved in this application?

A No, sir. The Devonian working interest ownership is different from the Bough "C".

Q But that does not have anything to do with the dual completion portion of the application, does it?

A No, sir.

Q Is all of the overriding royalty and royalty interest common throughout?

A It is common, yes, sir.

Q As to all zones?

A Yes.

Q Both the Devonian and the Langley-Mattix and Blinbry, is that correct?

A We're talking about the Bough "C" and the Devonian.

Q Bough "C" and the Devonian?

A They are the same.



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Q Are they the same insofar as your dual completion is concerned. Mr. Thomas?

A Yes.

Q Now referring to what has been marked as Exhibit No. 2, would you identify that exhibit and discuss the information shown on it?

A Exhibit No. 2 is a schematic of the completion showing the casing program and tubing completions, packer settings and so forth. We have 13-3/8 casing set at 422 feet with cement circulated to surface. We have 8-5/8 casing set at 4315 feet with the top of the cement at 2417. We have 7-inch casing set at 9970. That has been switched down to 5-1/2 from there down to 12,688 feet, with the total depth of the well at 12,690.

The 5-1/2 casing was cemented with 300 sacks of cement, the 7-inch casing was cemented through a DV tool which is set at 10,013 feet. The top of the cement behind the 7-inch pipe is at 7,833. Then this schematic shows the location of a permanent packer, a Baker Model "D" Packer at 9,790. The perforations below this, the Devonian perforations, are 12,634 to 12,638 feet. They will be separated from the Bough "C" perforations, which are at 9,737 to 9,755, by the Model "D" Packer.

Q In your opinion, will the completion such as this fully protect all producing horizons encountered in this well bore?

A Yes, it will.

Q Will this completion, if approved, result in the recovery



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of oil that would not otherwise be recovered?

A Yes, sir.

Q For what reason?

A Well, the Devonian is at present making top allowable, but we could not drill a well to this depth strictly for Devonian production.

Q You would not recommend to your management that such a well be drilled as a single completion in the Devonian?

A No, sir.

Q Will that, then, result in the prevention of waste, in your opinion?

A Yes, sir, in my opinion it would.

Q Turning to the commingling portion of the application, I direct your attention -- well, first let's get this log in. Would you refer to Exhibit 3 and identify that exhibit and state what information is shown thereon?

A The information on the Exhibit 3, which is an acousti-log, the perforations of the Devonian at 12,634 to 38 are marked, the top of the Devonian is shown to be 12,630 feet. Then the Bough "C" interval is shown to be at 9737 to 55, perforations, and the interval which is called Bough "C" would be about 9730 to 60.

Q Is this dual completion that's proposed by Amerada of the type that has heretofore been approved by the Oil Conservation Commission?



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A It is.

Q Referring now to Exhibit No. 4, would you discuss the information shown on that exhibit?

A Exhibit No. 4 is a drawing outlining the surface equipment, showing the stock tanks, separators, and proposed meter location for use in the subtraction method of commingling.

Q What wells will be connected to this commingling installation?

A At the present there's only one well drilled, the Anderson No. 1, but any other wells that would be drilled on this same lease.

Q Do you anticipate there would be other wells drilled?

A It's a possibility.

Q And will this installation be sufficient to take care of such production?

A It will.

Q How do you propose to account for the production from the separate zones?

A We propose to meter by a positive displacement meter the production from the Bough "C" zone and subtract that from the total daily production for the Devonian production.

Q Is there any difference in the gravities of the fluids from the two zones?

A There is very little. The Bough "C" gravity is 45.3, the Devonian gravity is 43.7.



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Q Are both zones at the present time top allowable zones?

A They are.

Q Would the commingling result in a gain or loss in the value of the product, as compared to its market value, if produced separately?

A It would make no change.

Q Would the installation be in the interest of conservation and the prevention of waste?

A In my opinion it would.

Q Would it result in an economic saving to the operator of the lease?

A Yes, sir.

Q Is the commingling installation of a type that meets the requirements of the Commission manual on commingling?

A It is.

Q Were Exhibits 1, 2, 3, and 4 prepared by your or under your supervision?

A Yes.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1 through 4.

MR. UTZ: Exhibits 1 through 4 will be admitted into evidence if there is no objection.

(Whereupon, Applicant's Exhibits Nos. 1 through 4 received in evidence.)

MR. KELLAHIN: That's all the questions I have of the



witness.

CROSS EXAMINATION

BY MR. UTZ:

Q Referring to your Exhibit No. 2, I note the cement behind the 8-5/8ths is topped at 2417, is that correct?

A Yes.

Q And bottom of the 13-3/8ths is 422?

A Yes.

Q Which leaves around 2,000 feet of open hole behind the casing. What formations or water bearing zones are in this area?

A To my knowledge, none.

Q You mean it's completely dry of everything?

A Well, we ran into nothing that would indicate fresh water or anything that needed to be protected during that interval.

Q Okay. The bottom of your 8-5/8ths is 4315 and the top of the cement on your 7-inch is 7833. That's an open zone area behind your 7-inch of around 3500 feet. Now what is in this area?

A Nothing as far as producing zones were encountered in that area. There were some fresh water zones, or appeared to be fresh water that in our opinion didn't need to be protected.

Q In your opinion fresh water doesn't need to be retained in its original aquifer?

A Sir?

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Q In your opinion fresh water doesn't need to be retained in its original aquifer?

A Well, I don't know that we encountered any fresh water.

Q If you did encounter any fresh water, would you say it ought to be retained in its aquifer?

A Yes, sir.

Q I'm not real clear about the 7-inch casing. Does it actually come up inside the 8-5/8ths?

A The 7-inch comes to the surface.

Q All the way to the surface?

A Yes, sir.

Q So this drawing should show that, shouldn't it?

A It does show it, doesn't it?

Q What is this lower casing?

A 5-1/2. It's swatched onto the bottom of the 7-inch.

We ran 7-inch down through the Bough "C" so we could have two full strings of dual completion equipment, and instead of setting 7-inch all the way to 12,000 feet, we swatched it down to 5-1/2, actually attached it onto the 7-inch.

Q So this lower casing that is cross hatched is your 5-1/2 inch?

A Yes, sir. This schematic drawing is in error in that regard. It does not show them connected, but they are.

Q Well, that's what was a little confusing. In regard to your Exhibit No. 4, how much time will the oil sit in your storage



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tanks before it is gauged?

A This will be a normal daily operation.

Q It will be gauged every 24 hours?

A Yes, sir.

Q How much shrinkage do you anticipate there will be after the oil hits the tank, from the time it's gauged?

A There should be very little just in the normal 24-hour period.

Q You do agree there will be some shrinkage?

A The normal amount for Devonian and Pennsylvanian production. I'm not sure what that figure would be.

Q Would that be in the neighborhood of maybe one percent?

A That's possible, yes.

Q It's your intention, then, to gauge the total oil and subtract the meter reading from the Bough "C" in order to arrive at the production from the Devonian?

A Yes.

Q How do you compensate for that shrinkage?

A By periodic check. We can shut the Devonian side down and run monthly checks for meter proving until we get this figure established.

Q So that the shrinkage will be divided between the two zones equally?

A Yes, sir.

Q You feel that the shrinkage in each zone will be pretty



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close to the same?

A With those gravities as close as they are, I feel pretty sure it will be.

Q On this diagram just below the meter there's a little circle with an "s" in it. What is that?

A Sampler.

Q You would estimate that the total impurities or B.S. and W. in the Devonian zone would be approximately the same as it is in the Bough "C"?

A For the present time, until water encroaches in the Devonian, it should be the same, and at that time we'll probably set a treater.

Q At any rate your separator would probably get most of that out for you at the meter?

A That's right.

Q What is the cost of the P.D. meter that you are setting there?

A Including the sampler, in the neighborhood of \$425.00.

Q Do you have any opinion as to what the GOR would be in each of these zones?

A GOR at the present time in the Bough "C" is about 1500 to 1, and at the present time the Devonian makes a very small amount of gas. We on original test determined it too small to measure.

Q How about your pressures, type of crude?



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A They are both sweet crude; and are you talking about bottom hole pressures?

Q Yes.

A Bough "C" bottom hole pressure at perforation depths is 3428 pounds, and the Devonian is approximately 3530 pounds per square inch.

Q Were both of these zones flowing?

A We will have to gas lift the Devonian with gas from the Bough "C". The Devonian will flow intermittently, but to maintain top allowable we will have to gas lift.

Q You will bring the Bough "C" gas to the surface and then use it for the gas lift?

A Yes.

MR. UTZ: Are there any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements in this case? The case will be taken under advisement.

* * * *



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STATE OF NEW MEXICO)
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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 Hearing 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.

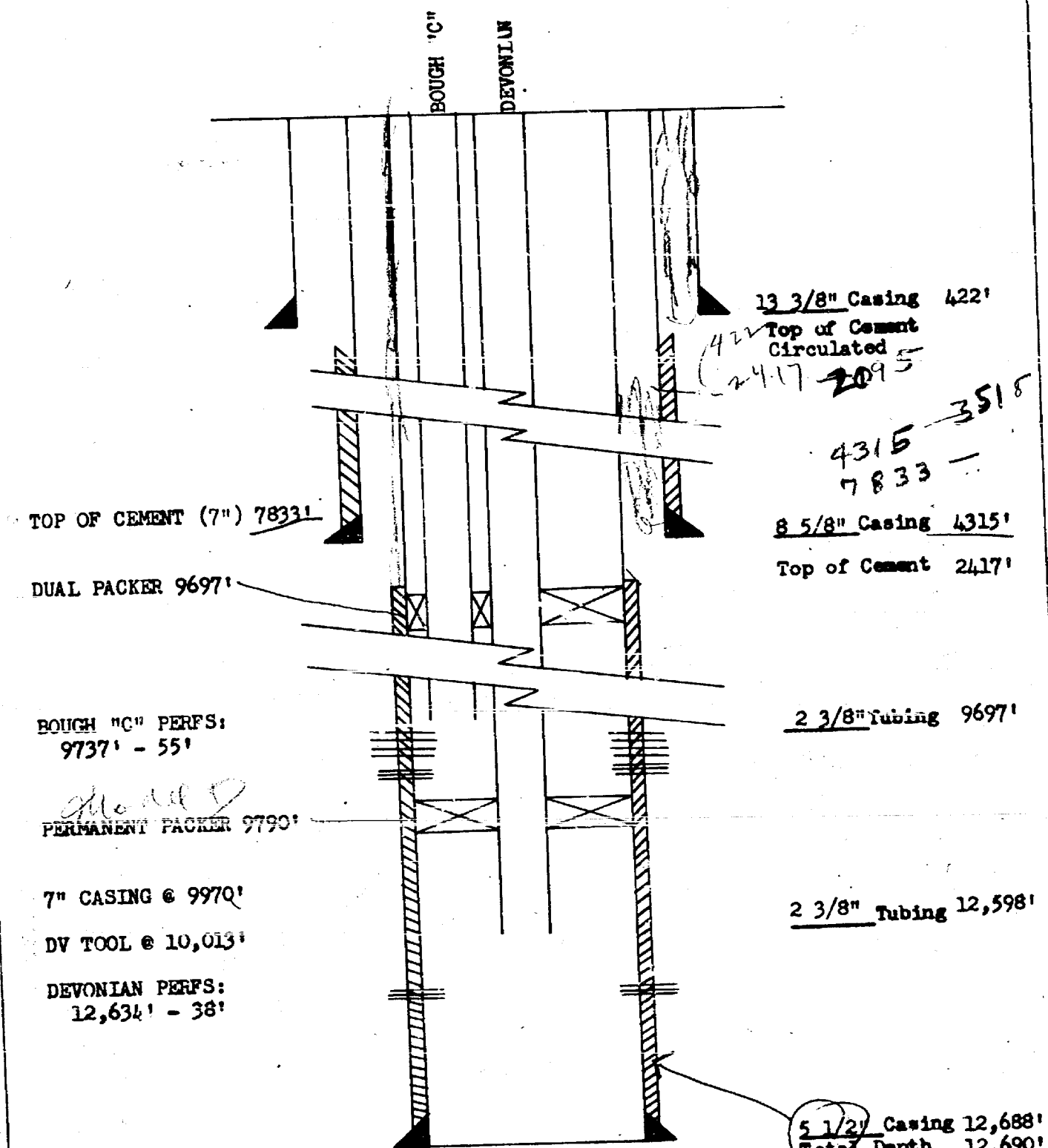
WITNESS my Hand and Seal this 11th day of June, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1963.

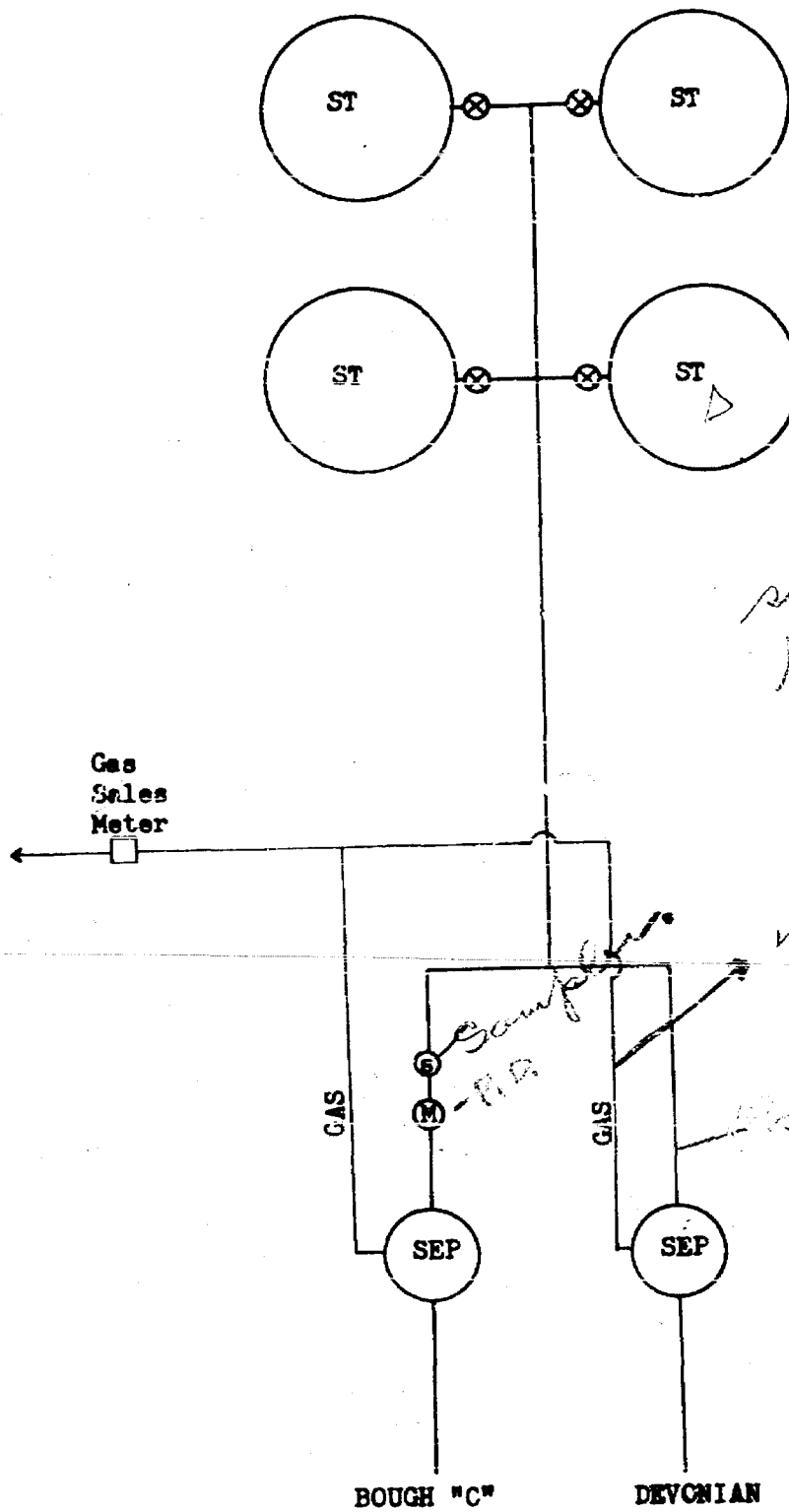
I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2829, heard by me on June 7, 1963.
James P. [Signature], Examiner
New Mexico Oil Conservation Commission





DIAGRAMMATIC SKETCH
AMERADA PETROLEUM CORPORATION
S. E. ANDERSON NO. 1
Lea Co., New Mexico

Case No. 2829
Exh- 2



AMERADA PETROLEUM CORPORATION
 PROPOSED INSTALLATION FOR THE
 COMINGLING OF OIL ON
 S. E. ANDERSON LEASE

Case No. 2829
 Exh A