

CASE 2467: Application of SHELL  
for a dual completion of its  
LIVINGSTON WELL NO. 12.

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2467

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production, Transcript,  
all Exhibits, Etc.

GOVERNOR  
EDWIN L. MECHEM  
CHAIRMAN

State of New Mexico  
Oil Conservation Commission

LAND COMMISSIONER  
E. S. JOHNNY WALKER  
MEMBER



P. O. BOX 871  
SANTA FE

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

January 17, 1962

Re: CASE NO. 2467

ORDER NO. R-2170

APPLICANT:

Shell Oil Company

Mr. Oliver Seth  
Seth, Montgomery, Federici & Andrews  
P. O. Box 828  
Santa Fe, New Mexico

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

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. 2467  
Order No. R-2170

APPLICATION OF SHELL OIL COMPANY  
FOR A DUAL COMPLETION, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 4, 1962, 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 17th day of January, 1962, 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, Shell Oil Company, is the owner and operator of the Livingston Well No. 12, located 4620 feet from the South line and 660 feet from the East line of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant seeks permission to complete said Livingston Well No. 12 as a dual completion (tubingless) in such a manner as to permit the production of oil from the Drinkard and Blinbry Oil Pools through parallel strings of 2 7/8-inch casing cemented in a common well bore.
- (4) That the mechanics of the proposed dual completion are feasible and are in accord with good conservation practices.
- (5) That approval of the subject application will neither cause waste nor impair correlative rights.

-2-

CASE No. 2467  
Order No. R-2170

IT IS THEREFORE ORDERED:

(1) That the applicant, Shell Oil Company, is hereby authorized to complete its Livingston Well No. 12, located 4620 feet from the South line and 660 feet from the East line of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (tubingless) in such a manner as to permit the production of oil from the Drinkard and Blinbry Oil Pools through parallel strings of 2 7/8-inch casing cemented in a common well bore.

PROVIDED HOWEVER, That the applicant shall use a sufficient amount of cement to cement back to approximately 2300 feet in the salt.

PROVIDED FURTHER, 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.

PROVIDED FURTHER, That the operator shall conduct zone segregation tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Drinkard zone, 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



*E. L. Mechem*

EDWIN L. MECHEM, Chairman

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

*A. L. Porter, Jr.*

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

esr/

DOCKET: EXAMINER HEARING - THURSDAY - JANUARY 4, 1962

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 2448: (Continued)

Application of Pan American Petroleum Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project on its C. J. Holder, State Holder Oil Unit, State "CA", State Oil Unit and Gallegos Canyon Unit Leases, San Juan County, New Mexico, in the Cha Cha-Gallup Oil Pool with water injection initially to be through five wells located in Sections 8 and 16, Township 28 North, Range 13 West, and Section 23, Township 28 North, Range 12 West, and requests adoption of special rules to govern the operation of said project.

CASE 2449: (Continued)

Application of Pan American Petroleum Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a pressure maintenance project on its Navajo Tribal "H" and Gallegos Canyon Unit Leases, San Juan County, New Mexico, in the Totah-Gallup Oil Pool with water injection initially to be through five wells located in Section 35, Township 29 North, Range 13 West, Section 12, Township 28 North, Range 13 West, and Sections 13 and 24, Township 29 North, Range 14 West, and requests adoption of special rules to govern the operation of said project.

CASE 2429: (Continued)

Application of Standard Oil Company of Texas for approval of the Jurnegan Point Unit Agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Jurnegan Point Unit Agreement embracing 10,240.84 acres, more or less, of State and fee lands in Township 24 South, Ranges 24 and 25 East, Eddy County, New Mexico.

CASE 2452: (Continued)

Application of Southwest Production Company for an order pooling all mineral interests in the Basin-Dakota Gas Pool in the W/2 of Section 7, Township 30 North, Range 11 West, San Juan County, New Mexico. Interested parties include Maleta Y. Brimhall, Phoenix, Arizona, and Barbara Brimhall Burnham, Aztec, New Mexico.

CASE 2463:

Application of Amerada Petroleum Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its L. M. Lambert Well No. 2, located in Unit G of Section 6, Township 20 South, Range 37 East, Lea County, New Mexico, as a dual completion (conventional) in the Grayburg and McKee zones in the Monument Field, with the production of gas from the Grayburg zone to be through a string of 1 1/2-inch tubing and the production of gas from the McKee zone to be through a parallel string of 2 3/8-inch tubing.

CASE 2464:

Application of Amerada Petroleum Corporation for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its State NJ "A" Well No. 1, located in Unit A of Section 2, Township 25 South, Range 37 East, Lea County, New Mexico, as a triple completion (combination) in the McKee, Fusselman and Ellenburger zones in the North Justis Field, with the production of oil from the Fusselman and Ellenburger zones to be through tubing installed within parallel strings of 3 1/2-inch casing and the production of oil from the McKee zone to be through a parallel string of 2 7/8-inch casing, all of said casing strings to be cemented in a common well bore.

CASE 2465:

Application of Skelly Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Hobbs "N" Well No. 1, located in Unit D of Section 8, Township 18 South, Range 35 East, Lea County, New Mexico, as a dual completion (conventional) in the Vacuum-Abo Pool and in an undesignated Drinkard pool, with the production of oil from both zones to be through parallel strings of 2 1/16-inch tubing.

CASE 2466:

Application of Shell Oil Company for a 320-acre non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to establish a

320-acre non-standard gas proration unit in the Eumont Gas Pool, comprising the S/2 of Section 22, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the Turner Well No. 7, located at an unorthodox location 1650 feet from the South line and 330 feet from the West line of said Section 22.

CASE 2467:

Application of Shell Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Livingston Well No. 12, located 4620 feet from the South line and 660 feet from the East line of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico, as a dual completion (tubingless) in the Drinkard and Blinebry Oil Pools, with the production of oil from both zones to be through parallel strings of 2 7/8-inch casing cemented in a common well bore.

CASE 2468:

Application of Shell Oil Company for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Livingston Well No. 11, located 3300 feet from the South line and 660 feet from the West line of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, as a triple completion (tubingless) in the Drinkard Oil, Tubb Gas and Blinebry Oil Pools, with the production of oil from the Drinkard and Blinebry zones and the production of gas from the Tubb zone to be through parallel strings of 2 7/8-inch casing cemented in a common well bore.

CASE 2469:

Application of El Paso Natural Gas Company for an order establishing special rules and regulations for the Lusk-Strawn Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order establishing special rules and regulations for the Lusk-Strawn Pool, Lea County, New Mexico, including provisions for 160-acre proration units and a limiting gas-oil ratio of 4000 to 1.

CASE 2470:

Application of J. R. Cone for a 40-acre non-standard gas proration unit and for an exception to Order No. R-1670, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a 40-acre non-standard gas proration unit in the Blinebry Gas Pool comprising the NE/4 SE/4 of Section 21, Township 21 South, Range 37 East, Lea



County, New Mexico, said unit to be dedicated to the Anderson Well No. 2, located 1650 feet from the South line and 330 feet from the East line of said Section 21. Applicant further seeks an exception to Rule 34 (A) of the special rules and regulations for the Blinebry Gas Pool as contained in Order No. R-1670, to permit the gas produced from said Anderson Well No. 2 to be produced into a low-pressure separator only.

CASE 2471: Application of Leonard Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Federal Ginsberg Well No. 8, located in Unit M of Section 31, Township 25 South, Range 38 East, Lea County, New Mexico, as a dual completion (conventional) in the Langlie-Mattix and Justis-Blinebry Pools, with the production of oil from both zones to be through parallel strings of 2 3/8-inch tubing, separation of the zones to be by a liner re-entry shoe seal assembly.

CASE 2472: Application of Newmont Oil Company for approval of a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Loco Hills Grayburg No. 4 Sand Unit Agreement, covering 5320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, Eddy County, New Mexico.

CASE 2473: Application of Newmont Oil Company for expansion of its Loco Hills Waterflood Project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks permission to expand its Loco Hills Waterflood Project to include the proposed West Loco Hills Grayburg No. 4 Sand Unit Area, comprising 5320 acres, more or less, in Townships 17 and 18 South, Ranges 29 and 30 East, Eddy County, New Mexico.

OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 1-8-62

CASE 2467

Hearing Date 9 am 1-4-62  
DSN @ SF

My recommendations for an order in the above numbered cases are as follows:

Approve Shells deal completion (Tubingless)  
as requested. Will produce  
Primary oil and Dr oil thru parallel  
strings of 2 3/8 casing cemented in  
a common well bore. Specify  
they shall cement w/ sufficient cement  
to come back to approximately  
2300' in the salt. Specify  
segregation tests upon completion  
and annuallly thereafter during  
the gov. test period for the  
Drinhard

Isaiah  
Staff Member

A. K. MONTGOMERY  
OLIVER SETH  
WM. FEDERICI  
FRANK ANDREWS  
FRED C. HANNAHS  
GEORGE A. GRAHAM, JR.

SETH, MONTGOMERY, FEDERICI & ANDREWS

ATTORNEYS AND COUNSELORS AT LAW

301 DON GASPAR AVENUE  
SANTA FE, NEW MEXICO

November 24, 1961

J. O. SETH  
COUNSEL

POST OFFICE BOX 828  
TELEPHONE YU 3-7315

New Mexico Oil Conservation Commission  
P.O. Box 871  
Santa Fe, New Mexico

Re: Application for Hearing  
Livingston #12

Attention: Mr. A.L. Porter, Jr., Secretary-Director

Gentlemen:

Please consider this letter an application by Shell Oil Company for permission to dually complete its Livingston No. 12 well as a Drinkard Oil and Blinebry Oil. The well will be located on applicant Livingston's lease 4620 feet FSL and 660 feet FEL, Section 4, Township 21 South, Range 37 East, Lea County, New Mexico.

The location of the Blinebry zone is expected at 5720 feet and the Drinkard at 6580 feet. The proposal is to run two strings of 2 7/8 inch O.D. casing to 6750 feet, cementing these strings in a common 8 3/4 inch well bore, and directionally perforate each string. The annulus will be filled with cement to 4000 feet, and surface casing set at 275 feet and cemented to the surface.

It would be appreciated if this matter would be set down for an examiner hearing.

Yours very truly,



OS:fa  
cc: Shell Oil Company  
Roswell, New Mexico

*Do not  
Mailed  
12-20-61*

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
January 4, 1962

EXAMINER HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1162

ALBUQUERQUE, N. M.  
PHONE 243-6691

IN THE MATTER OF:

Application of Shell Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Livingston Well No. 12, located 4620 feet from the South line and 660 feet from the East line of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico, as a dual completion (tubingless) in the Drinkard and Blinbry Oil Pools, with the production of oil from both zones to be through parallel strings of 2 7/8-inch casing cemented in a common well bore.

CASE NO.  
2467

BEFORE:

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 2467.

MR. WHITFIELD: It has already been called.

MR. SETH: May the record show we have the same appearances and the same witness and he has been sworn in 2468.

MR. NUTTER: Yes, sir.



JOSEPH G. YOPE,

recalled as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SETH:

Q Tell the Examiner briefly what the purpose of this application is.

A Shell Oil Company proposes a dual completion of its Livingston Well No. 12 in the Drinkard Oil and Blinebry Oil Pools in Section 4, Township 21 South, Range 37 East of Lea County, New Mexico, utilizing two parallel strings of 2 7/8-inch casing cemented in a common well bore.

Q Do you have an exhibit showing the location of the proposed well completion?

(Whereupon, Applicant's Exhibit No. 1 marked for identification.)

A Yes, Exhibit 1. It is a plat of the surrounding area. The Livingston lease is denoted in red. The proposed dual completion well No. 12 is indicated on the map. This plat also shows the surrounding or offset wells and operators.

Q On the proposed completion, do you have a sketch showing the mechanical completion?

(Whereupon, Applicant's Exhibit No. 2 marked for identification.)

A Yes, Exhibit No. 2. It is a diagrammatic sketch of our proposed dual completion in Livingston No. 12.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARGINGTON, N. M.  
PHONE 325-1112

ALBUQUERQUE, N. M.  
PHONE 243-6691



Q Does this proposed completion follow closely the completion that you have just discussed in 2468 on the Livingston No. 11, the only difference being that this is a dual and the other is a triple completion?

A Yes, sir, that is correct. The information pertinent to the zones of interest and the cementing procedures, so forth, are all the same except one less string is involved in this proposal.

Q Would you nevertheless mention briefly your proposal on the individual strings in this well?

A As shown on Exhibit 2, 9 5/8-inch casing will be cemented at 303 feet and cemented to the surface. We propose to run two strings of 2 7/8-inch O.D. casing to approximately 6750 feet and cement simultaneously through both strings and bring our cement top back up into the salt approximately 2300 feet. The Drinkard string here will be 2 7/8-inch O.D. N-80 EUE 6 1/2 pound tubing, the Blinebry string will be 2 7/8-inch O.D. J 55, 6 1/2 pound tubing. The Drinkard zone will be selectively perforated from approximately 6600 feet to 6720 feet, while the Blinebry zone will be selectively perforated from 5770 feet to 5890 feet. Both strings will be equipped with 55 rubber turbulizers from T. D. back to approximately 5000 feet. The purpose, as in the previous case of these turbulizers, is to insure turbulent action of the cement in conjunction with the use of two cementing trucks, one on each string. We anticipate



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1112

ALBUQUERQUE, N. M.  
PHONE 243-6691

a turbulent flow action in the annular space and hope for a good cement job from that. Here again we will also install radioactive collars in the string. The purpose of these collars are to enable us to run one collar locator log in one string and be able to pick up the radioactive collar in the other string, thereby only running one locator log. We intend to use oriented perforating guns and insure proper perforations by maintaining the pressure on one string while perforating the other. Also, each zone will be fracture treated with approximately 15,000 gallons of loose crude containing sand. The zones will be treated individually observing the pressure on the other string.

Q Now, you have testified to the characteristics of the zones in the other case. At this location you would expect them to be identical, would you not?

A Yes, we do.

Q And similarly on corrosion?

A Yes, sir.

Q What about the production from the two zones?

A Again, the production will be handled in the central battery which contains adequate metering and testing facilities for each zone.

Q Do you believe that the approval of this application will be in the interest of conservation?

A Yes, sir, I do.

Q Do you have any further comments or exhibits that



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FARMINGTON, N. M.  
PHONE 325-1192

ALBUQUERQUE, N. M.  
PHONE 243-6691

you would like to present?

A No, sir.

MR. SETH: We would like to offer our two exhibits,  
Mr. Examiner.

MR. NUTTER: Shell's Exhibits 1 and 2 will be admitted  
in evidence.

(Whereupon, Applicant's Exhibits  
1 and 2 admitted in evidence.)

MR. SETH: That's all the direct we have.

MR. NUTTER: Does anyone have any questions of Mr.

Yope?

CROSS EXAMINATION

BY MR. NUTTER:

Q You will cement these two strings simultaneously as  
you would in the triple?

A Yes, sir, one truck on each string.

Q And perforate and frac each string simultaneously  
observing the pressures on the others?

A Yes, sir.

MR. NUTTER: Any further questions? The witness may  
be excused.

(Witness excused.)

MR. SETH: That's all we have.

MR. NUTTER: Does anyone have anything they wish to  
offer in Case 2467? We'll take the case under advisement and





take a fifteen minute recess.

\* \* \* \*

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, 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 4th day of January, 1962.

*Ada Dearnley*  
COURT REPORTER-NOTARY PUBLIC

My commission expires:

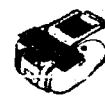
June 19, 1963

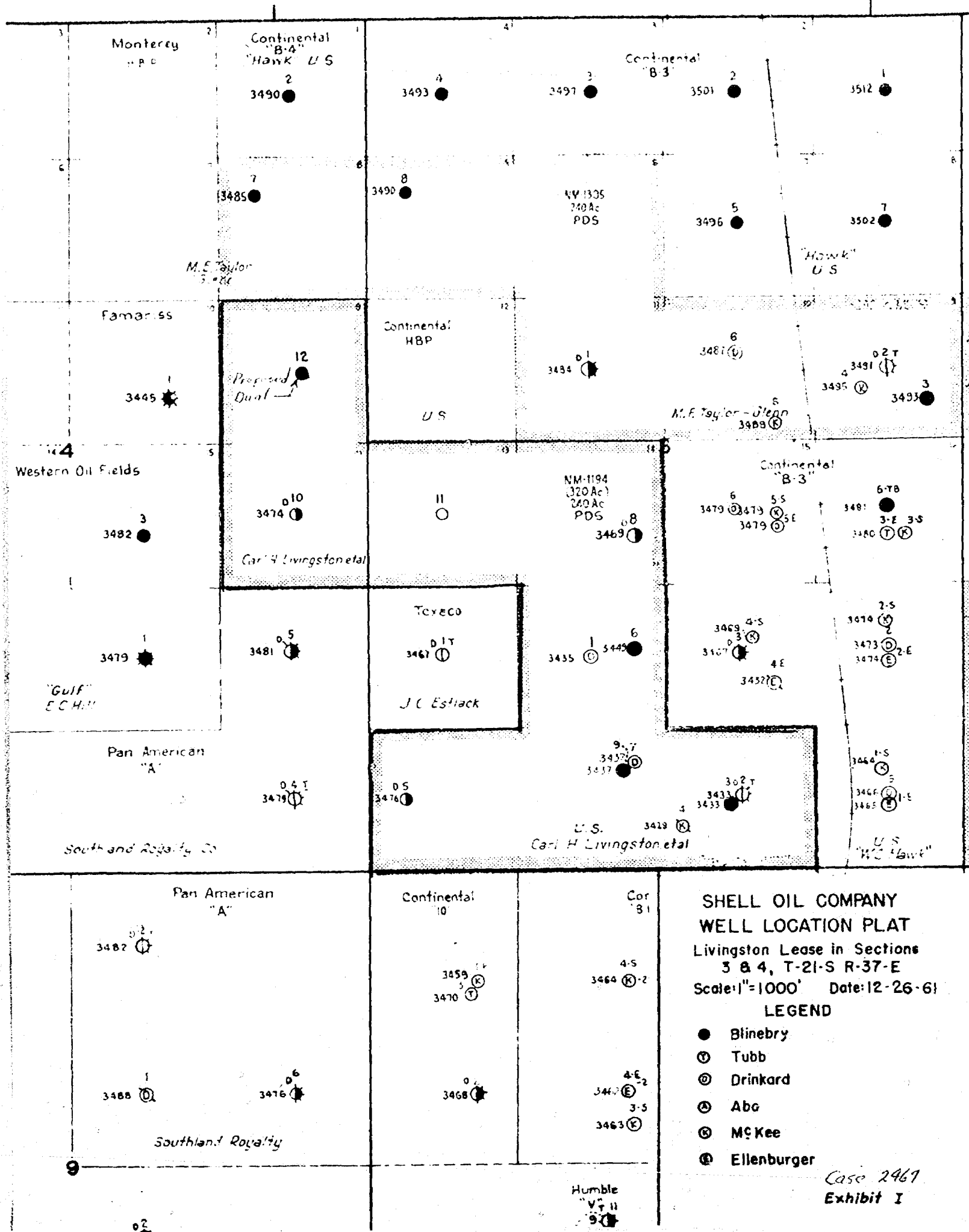
I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 2467,  
heard by me on 1-4, 1962.  
*K. K. K.*, Examiner  
New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.  
PHONE 325-1182

ALBUQUERQUE, N. M.  
PHONE 243-6691





Formation Tops

Yates  
2630'

Queen  
3445'

Penrose  
3585'

Grayburg  
3810'

San Andres  
4000'

Glorieta  
5210'

Blinebry  
5720'

Tubb  
6200'

Drinkard  
6580'

✓ 9 5/8" at 308'  
Cement to surface

Blinebry String  
2 7/8" OD, J-55  
6.5 # 269

Cement top 2300'

*into 466 20 ft.*

Drinkard String  
2 7/8" OD, N-80

*6.5 # 269*

*55 microturbolizers  
from TD,  
to approx 5000'*

10' sub w/radio-  
active collars at  
5635'-5645'

Blinebry Perfs  
approx 5770'-5890'

D & B Seating  
Shoe 6080'

6' sub w/radioactive collars at  
6460'-6466'

Drinkard perfs approx 6600'-6720'

D & B Seating Shoe 6722'

Latch down plugs at 6725'

TD = 6750' casing of TD

Note: Both strings will be  
equipped with 55  
turbolizers from TD  
back to 5000'

*will cement simultaneously  
will perf + treat one  
zone at time observing  
press on others.*

SHELL OIL COMPANY

Diagrammatic Sketch of Proposed  
Dual Completion for  
Livingston No. 12  
Drinkard Oil  
Blinebry Oil

4620' FSL & 560' FEL Sec. 4-21S-37E  
Lea County, New Mexico

Case 2467  
Exhibit 2