

Case No.

1465

Application, Transcript,  
Small Exhibits, Etc.

CASE 1415: Magnolia Petr. Co. application  
for oil- and gas completion of its New Mexico  
No. 1 Well, 2-165-325.

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

June 23, 1958

Mr. J. E. Sperling  
Modrall, Seymour, Sperling, Roehl & Harris  
P.O. Box 466  
Albuquerque, New Mexico

Dear Mr. Sperling:

On behalf of your client, Magnolia Petroleum Company, we enclose two copies of Order R-1207 issued June 18, 1958, by the Oil Conservation Commission in Case 1465, which was heard on June 11th at Santa Fe before an examiner.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

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Encls.

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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. 1465  
Order No. R-1207

APPLICATION OF MAGNOLIA PETROLEUM  
COMPANY FOR APPROVAL OF AN OIL-OIL  
DUAL COMPLETION IN THE WOLFCAMP  
FORMATION ADJACENT TO THE ANDERSON  
RANCH-WOLFCAMP POOL AND IN THE  
ANDERSON RANCH-DEVONIAN POOL, 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 11, 1958, 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 18<sup>th</sup> day of June, 1958, 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, Magnolia Petroleum Company, is the owner and operator of the New Mexico "S" Well No. 1, located 990 feet from the North line and 1650 feet from the East line of Section 2, Township 16 South, Range 32 East, NMPN, Lea County, New Mexico.
- (3) That the applicant proposes to dually complete the above-described New Mexico "S" Well No. 1, in such a manner as to permit the production of oil from the Wolfcamp formation adjacent to the Anderson Ranch-Wolfcamp Pool and the production of oil from the Anderson Ranch-Devonian Pool through parallel strings of 2-inch tubing.
- (4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (5) That approval of the subject application will not cause waste nor impair correlative rights.

(6) That the subject application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Magnolia Petroleum Company, be and the same is hereby authorized to dually complete its New Mexico "S" Well No. 1, located 990 feet from the North line and 1650 feet from the East line of Section 2, Township 16 South, Range 32 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of oil from the Wolfcamp formation adjacent to the Anderson Ranch-Wolfcamp Pool and the production of oil from the Anderson Ranch-Devonian Pool through parallel strings of 2-inch tubing.

PROVIDED HOWEVER, That subject well shall be completed and thereafter produced in such a manner that there will be no commingling within the well-bore, either within or outside the casing, of gas, oil and gas, or oil produced from either or both of the separate strata,

PROVIDED HOWEVER, That prior to the actual dual completion the operator shall make pressure tests of the casing to prove that no casing leaks exist. In the event a casing leak is apparent the operator shall take appropriate steps to adequately repair the leak. The results of these tests shall be reported to the Commission on Form C-103.

PROVIDED FURTHER, That upon the actual dual completion of such subject well applicant shall submit to the appropriate District Office of the Commission copies of Oil Conservation Commission Form C-103, Form C-104, Form C-110, and Form C-122, outlining the information required on those forms by existing Rules and Regulations, and two copies of the electric log of the well.

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used at any time as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil or gas-liquid ratio thereof determined, and

PROVIDED FURTHER, That the operator shall make any and all tests, including segregation and packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Anderson Ranch-Devonian Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any other tests and/or determinations as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of offset operators if any there be at their election, and the results of each test, properly attested to by the applicant herein and all witnesses, shall be filed with the Commission within fifteen (15) days after the completion of such tests, and further,

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Case No. 1465  
Order No. R-1207

that applicant shall file with the Commission in duplicate a packer-setting affidavit, which affidavit shall be due within fifteen (15) days of the dual completion or whenever the packer is disturbed, and

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas-oil ratio or gas-liquid ratio, and reservoir pressure determination for each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*E. L. Mechem*

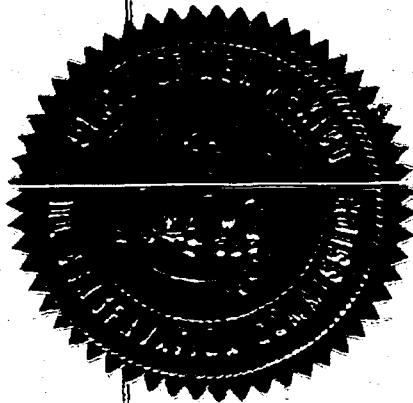
EDWIN L. MECHEM, Chairman

*M. E. Morgan*

MURRAY E. MORGAN, Member

*A. L. Porter, Jr.*

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



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OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

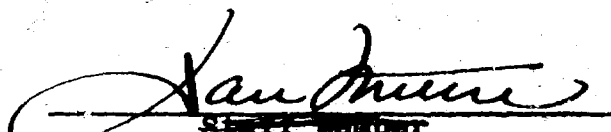

Date June 12, 1958

CASE NO. 1465

HEARING DATE 9:00 A.M. 6/11/58 DSN SF

My recommendations for an order in the above numbered case(s) are as follows:

Enter an order approving the oil-oil dual completion sought by Magnolia in the subject case. Applicant has established that the Anderson-Ranch Wolfcamp Pool and Anderson Ranch Devonian Pool may be dually completed with the resultant recovery of additional oil but that economics would prevent drilling the additional well which would be required or not the dual completion approved. Granting of the application will not cause waste nor impair correlative rights.

  
Stan Hunter  


af  
J. R. MODRALL  
AUGUSTUS T. SEYMOUR  
JAMES E. SPERLING  
JOSEPH E. ROEHL  
GEORGE T. HARRIS  
DEAN P. KIMBALL  
DANIEL A. SISK  
JOHN M. STEWART  
LELAND S. SEGBERRY

Case 1465  
Hearing

LAW OFFICES OF  
MODRALL, SEYMOUR, SPERLING, ROEHL & HARRIS

SIMMS BUILDING  
P. O. BOX 466  
ALBUQUERQUE, NEW MEXICO

TELEPHONE CHAPEL 3-4514

JOHN F. SIMMS (1885-1954)

May 12, 1958

New Mexico Oil Conservation Commission  
107 Mabry Hall  
Capitol Building  
Santa Fe, New Mexico

Re: Application of Magnolia Petroleum Company  
For Authority to Dually Complete  
New Mexico "S" No. 1 Well - NW $\frac{1}{4}$ NE $\frac{1}{4}$   
Section 2, 16S, 32E, Lea County, New Mexico,  
Anderson Ranch Pools

Gentlemen:

Enclosed are three copies of Application in  
the above matter which we would appreciate your setting  
for hearing on May 28, 1958, if it is possible to do so.  
The reason for the request is that Magnolia has another  
dual completion application pending which we understand  
will be heard on that date.

Shown below are the names and addresses of the  
offset operators who are being furnished copies of the  
enclosed Application.

Very truly yours,

*James E. Sperling*  
James E. Sperling

JES:sj  
Encl.

c.c. Gulf Oil Corporation  
P. O. Box 1667  
Hobbs, New Mexico

Sunray Mid-Continent Oil Company  
P. O. Box 128  
Hobbs, New Mexico

*Docket Mailed  
5-27-58  
BP*

New Mexico Oil Conservation Commission  
May 12, 1958  
Page 2

c.c. Phillips Petroleum Company  
P. O. Box 2105  
Hobbs, New Mexico

Humble Oil and Refining Company  
P. O. Box 2347  
Hobbs, New Mexico

DOCKET: EXAMINER HEARING JUNE 11, 1958

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, NM

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 1337: Application of Gulf Oil Corporation for an order amending Order R-1093. Applicant, in the above-styled cause, seeks an order amending Order R-1093 to provide for the commingling, in exception to Rule 303, but only after separate measurement, of oil produced from the Fusselman, Ellenburger, and McKee formations underlying its Learcy McBuffington Lease, comprising the S/2 of Section 13, Township 25 South, Range 37 East, Lea County, New Mexico, and the transfer of said production by means of automatic custody transfer equipment, in exception to Rule 309 (a); applicant also seeks authority to commingle the production, after separate measurement, from the Blinebry and Drinkard formations and the Langlie-Mattix Pool underlying the above-described McBuffington Lease, and to transfer said production by means of automatic custody transfer equipment. Applicant further seeks authority to produce more than 16 wells into each of the common transfer facilities described above, in exception to Rule 309 (a).

CASE 1341: Application of Jal Oil Company, Inc. for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Sarkeys Well No. 2, located 660 feet from the North and West lines of Section 25, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry Oil Pool and oil from the Tubb Gas Pool through parallel strings of tubing.

CASE 1464: Application of Amerada Petroleum Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimberley Well No. 3, located 1980 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Fusselman adjacent to the Justis-Fusselman Pool, and oil from the Drinkard formation adjacent to the Justis-Drinkard Pool through parallel strings of tubing.

CASE 1465: Application of Magnolia Petroleum Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its New Mexico "S" No. 1 Well, located 990 feet from the North line and 1650 feet from the East line of Section 2, Township 16 South, Range 32 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Wolfcamp formation adjacent to the Anderson Ranch-Wolfcamp Pool and oil from the Anderson Ranch-Devonian Pool through parallel strings of tubing.

- CASE 1466: Application of Tidewater Oil Company for an exception to Rule 309 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing the installation of automatic custody transfer equipment with positive displacement meters and automatic sampling equipment and other related facilities to receive, measure, and transfer custody of oil from the Justis-Ellenburger Pool produced from the wells located on its Coates "C" Lease, which comprises the E/2, SE/4 NW/4, and NE/4 SW/4 of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 1467: Application of Continental Oil Company for the establishment of a new Tubb gas pool and for the promulgation of special rules and regulations. Applicant, in the above-styled cause, seeks an order establishing a new pool for Tubb gas production to be designated as the Warren-Tubb Gas Pool with horizontal limits consisting of the E/2 of Section 28, Township 20 South, Range 38 East, Lea County, New Mexico. The applicant further seeks the promulgation of special pool rules similar to those adopted for the Tubb Gas Pool, as set forth in Order R-586, subject to modification of certain of said rules.
- CASE 1468: Application of Continental Oil Company for the establishment of a new Blinebry gas pool and for the promulgation of special rules and regulations. Applicant, in the above-styled cause, seeks an order establishing a new pool for Blinebry gas production to be designated as the Warren-Blinebry Gas Pool with horizontal limits consisting of the E/2 of Section 28, Township 20 South, Range 38 East, Lea County, New Mexico. The applicant further seeks the promulgation of special pool rules similar to those adopted for the Blinebry Gas Pool, as set forth in Order R-610, subject to modification of certain of said rules.
- CASE 1469: Application of Phillips Petroleum Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the S/2 of Section 14, Township 19 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Bern "A" Well No. 1, located 660 feet from the South and East lines of said Section 14.
- CASE 1470: Application of Phillips Petroleum Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 320-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the N/2 of Section 12, Township 19 South, Range 36 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Monument Well No. 1, located 1977 feet from the North line and 660 feet from the East line of said Section 12.

CASE 1471: Application of Phillips Petroleum Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 240-acre non-standard gas proration unit in the Tubb Gas Pool consisting of the NW/4 and the W/2 SW/4 of Section 24, Township 22 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Sims Well No. 3, located 1980 feet from the North and West lines of said Section 24.

CASE 1472: Application of Sunray Mid-Continent Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State Land 15 Well No. 3, located 660 feet from the South line and 1980 feet from the East line of Section 16, Township 21 South, Range 37 East, Lea County, New Mexico, to permit the production of oil from the Drinkard Pool and oil from the Blinebry Oil Pool through parallel strings of tubing.

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
MAGNOLIA PETROLEUM COMPANY FOR AUTHORITY  
TO DUALY COMPLETE ITS NEW MEXICO "S" NO. 1  
LOCATED 990 FEET FROM THE NORTH LINE AND  
1650 FEET FROM THE EAST LINE OF SECTION 2,  
TOWNSHIP 16 SOUTH, RANGE 32 EAST, LEA COUNTY,  
NEW MEXICO, IN THE ANDERSON RANCH (DEVONIAN)  
POOL AND THE ANDERSON RANCH (WOLFCAMP) PCOL.

CASE NO. 1465

*10 1/2 mile*

A P P L I C A T I O N

TO THE HONORABLE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO:

COMES NOW Magnolia Petroleum Company, Applicant herein, and respectfully alleges and states as follows:

1. That it is the owner and operator of an oil and gas lease covering the NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 2, Township 16 South, Range 32 East, Lea County, New Mexico, as shown on plat attached hereto labelled Exhibit "A".
2. That it has drilled its New Mexico "S" No. 1 on the aforementioned lease and has completed same at a plugged back total depth of 13,418 feet. Said well has 9-5/8 inch casing set at 4,122 feet with 2,100 sacks of cement and 7-5/8 inch casing set at 10,428 feet with 350 sacks of cement and 3,182 feet of 5-1/2 inch liner set at 13,420 feet with 250 sacks of cement.
3. That said well is presently producing through perforations in the Devonian reservoir at 13,414 feet to 13,417 feet.
4. That it is proposed to dually complete this well by setting Baker production packer at 10,000 feet between the Wolfcamp and Devonian formations, perforating the 7-5/8 inch casing opposite the Wolfcamp formation from 9,826 feet to 9,854 feet and from 9,866 feet to 9,872 feet. Each zone will be produced through separate parallel strings of 2 inch tubing as shown on Exhibit "B" attached hereto.
5. That the method of dual completion proposed herein is in accordance with good engineering and production practices, will prevent waste, protect the correlative rights of all parties concerned and will prevent the migration of fluids from one formation to the other.

WHEREFORE, Applicant prays that this Application be set for hearing, that notice be given as required by law, and that upon the evidence adduced at such hearing, this Commission issue an order granting Applicant approval to dually complete its New Mexico "S" No. 1 in the Anderson Ranch (Devonian) and Anderson Ranch (Wolfcamp) oil pools.

DATED this 12th day of May, 1958.

MAGNOLIA PETROLEUM COMPANY

By MODRALL, SEYMOUR, SPERLING, ROEHL & HARRIS

By

*James E. Sperling*  
James E. Sperling

Its Attorneys

P. O. Box 466

Albuquerque, New Mexico

R 32 E

Exhibit "A"

X-6645

T

15

S

T

16

S

Gulf 32

Texas

Philips

Humble

33



Gulf

Sunray

Magnolia

Gulf



New Mex "S"



Lea St. "R"

Gulf

Gulf



Lea State "CLA"

Sinclair

Gulf

Sunray Mid-Continent

4

1

+

2 State Land - 76

Continental

3

2

1

Lea State "CR"

Continental

18

15

17

14

12

7

6

Anderson Ranch Unit

R 32 E

—LEGEND—

- Devonian Oil Well
- Wolfcamp Oil Well
- ⊙ Proposed Dual Completion

MAGNOLIA PETROLEUM COMPANY

PRODUCING DEPARTMENT

DALLAS - TEXAS

DISTRICT - LEA

ANDERSON RANCH FIELD

Lea County, New Mexico

SHEET NO.

SCALE 1" = 2000'

DATE 4-15-58

DRAWN BJB

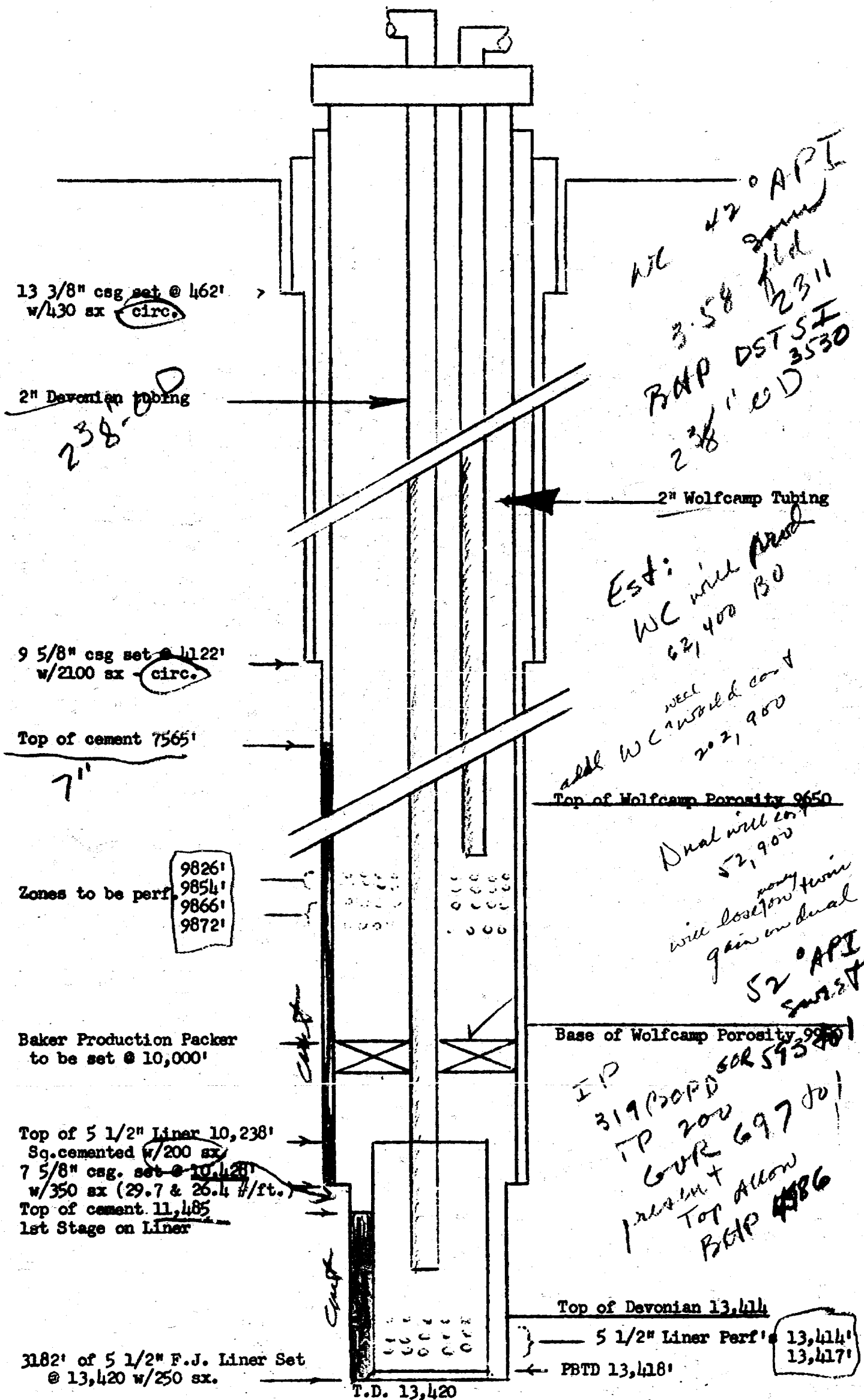
CHECKED *Q.L.F.*

APPROVED *C.L.P.*

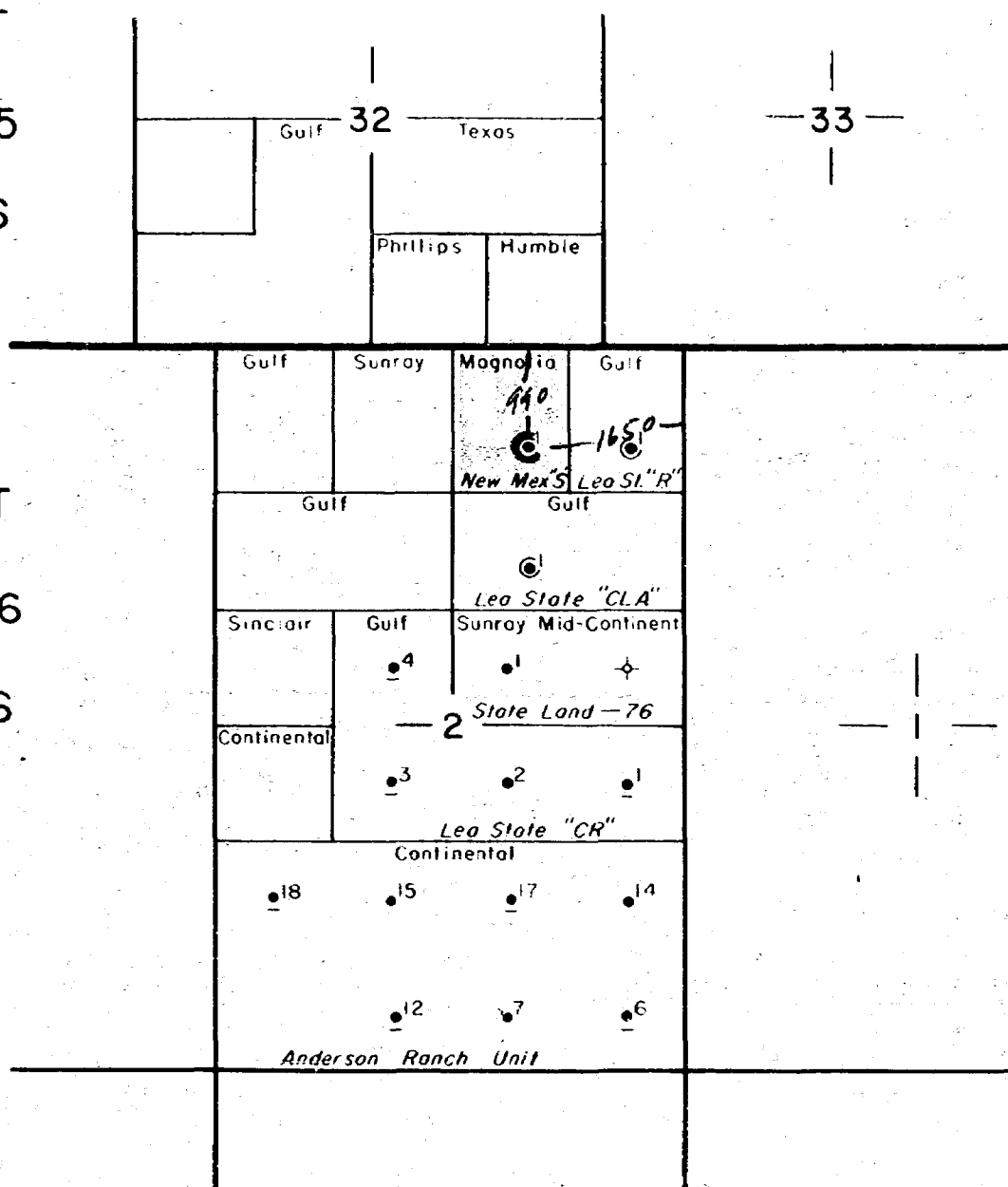
REVISED

PROPOSED DUAL COMPLETION  
New Mexico "S" #1  
Anderson Ranch (Devonian) Field  
Lea County, New Mexico

Exhibit "B"



R 32 E

T  
15  
ST  
16  
S

## — LEGEND —

- Devonian Oil Well
- Wolfcamp Oil Well
- ⊙ Proposed Dual Completion

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION

*Appl* EXHIBIT NO. 1465-1  
CASE NO. \_\_\_\_\_

MAGNOLIA PETROLEUM COMPANY  
PRODUCING DEPARTMENT  
DALLAS - TEXAS  
DISTRICT - LEA  
ANDERSON RANCH FIELD

Leo County, New Mexico

SHEET NO. \_\_\_\_\_

SCALE 1" = 2000'

DATE 4-15-58

DRAWN BJB

CHECKED *C.L.F.*

APPROVED *C.L.F.*

REVISED \_\_\_\_\_

PROPOSED DUAL COMPLETION  
New Mexico "S" #1  
Anderson Ranch (Devonian) Field  
Lea County, New Mexico

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

Ma 7201: EXHIBIT NO. 2  
CASE NO. 1465

13 3/8" csg set @ 462'  
w/430 sx - circ.

2" Devonian tubing

9 5/8" csg set @ 4122'  
w/2100 sx - circ.

Top of cement 7565'

Zones to be perf.  
9826'  
9854'  
9866'  
9872'

Baker Production Packer  
to be set @ 10,000'

Top of 5 1/2" Liner 10,238'  
Sq. cemented w/200 sx.  
7 5/8" csg. set @ 10,428'  
w/350 sx (29.7 & 26.4 #/ft.)  
Top of cement 11,485'  
1st Stage on Liner

3182' of 5 1/2" F.J. Liner Set  
@ 13,420 w/250 sx.

T.D. 13,420

Top of Devonian 13,414'

5 1/2" Liner Perf's 13,414'  
13,417'

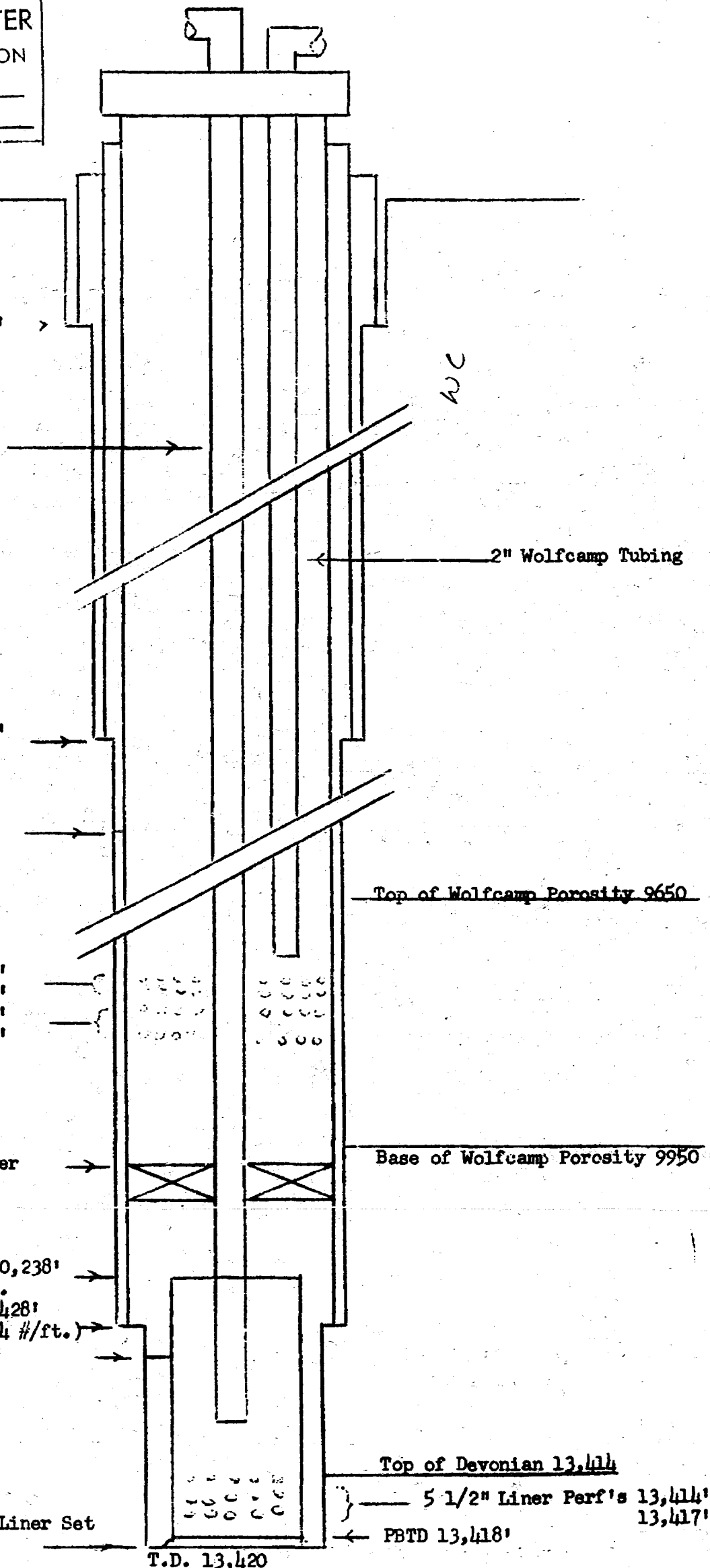
PBTD 13,418'

2" Wolfcamp Tubing

Top of Wolfcamp Porosity 9650

Base of Wolfcamp Porosity 9950

WC



BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

MAIN OFFICE OCC

1958 JUL 9 AM 8:36

IN THE MATTER OF:

CASE NO. 1465

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES  
INCORPORATED  
GENERAL LAW REPORTERS  
ALBUQUERQUE, NEW MEXICO  
3-6691 5-9546

June 11, 1958

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
JUNE 11, 1958

IN THE MATTER OF:

CASE NO. 1465 Application of Magnolia Petroleum Com-  
pany for an oil-oil dual completion.  
Applicant, in the above-styled cause,  
seeks an order authorizing the dual com-  
pletion of its New Mexico "S" No. 1 Well,  
located 990 feet from the North line and  
1650 feet from the East line of Section  
2, Township 16 South, Range 32 East, Lea  
County, New Mexico, in such a manner as  
to permit the production of oil from the  
Wolfcamp formation adjacent to the And-  
erson Ranch-Wolfcamp Pool and oil from  
the Anderson Ranch-Devonian Pool through  
parallel strings of tubing.

BEFORE:

Daniel S. Nutter, Examiner.

T R A N S C R I P T    O F    P R O C E E D I N G S

MR. NUTTER: Next case on the docket is Case 1465.

MR. PAYNE: Application of Magnolia Petroleum Company for  
an oil-oil dual completion.

(Witness sworn)

MR. SPERLING: J. E. Sperling, Modrall, Seymour, Sperling,  
Roehl & Harris, Albuquerque, appearing for the applicant.

W. H. LEACH, JR.,

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

## DIRECT EXAMINATION

BY MR. SPERLING:

Q Will you state your name, please?

A William Leach, Jr.

Q By whom are you employed and in what capacity?

A By the Magnolia Petroleum Company as aerial petroleum engineer, Tatum, New Mexico.

Q How long have you been so employed?

A Been employed by Magnolia since June of 1953.

Q Have you testified previously as an expert before the Commission?

A Not under oath.

Q Would you give us a short resume of your educational and experience background?

A I was graduated from the University of Pittsburg in June, 1953 with a Bachelor of Science degree in petroleum engineering. I've worked for Magnolia since then as a junior petroleum engineer in Leakey, Texas, and as an aerial petroleum engineer in Tatum, New Mexico.

MR. SPERLING: Are the witness' qualifications acceptable?

MR. NUTTER: They are. Please proceed.

Q Are you familiar with the application that has been filed in this matter?

A Yes, sir.

Q Would you please state what is proposed by the application?

A By the application, Magnolia proposes to dually complete its New Mexico "S" No. 1 Anderson Ranch-Devonian Field as a dual completion to produce from both Devonian and Wolfcamp zones in that Field. Production is proposed through two strings of two and three-eighths inch OD tubing with production segregated by Baker permanent packer.

Q I call your attention to Exhibit identified as No. 1, and ask you if that is the plat which identifies the area of the proposed dual completion, showing the other dual completions in the area and the lease ownership in the area?

A That is correct.

Q Would you state what the location of the well is as shown by the plat?

A The location of New Mexico "S" No. 1 is 990 feet from the North line, 1650 feet from the East line, Section 2, Township 16, South, Range 22 East, Lea County, New Mexico.

Q And from what zone is that well presently producing?

A Presently the well is producing from the Devonian formation at approximately 13,400 feet.

Q And what are the other particulars with reference to the production and gas-oil ratios and so forth?

A New Mexico "S" No. 1 was completed in the Anderson Ranch-Devonian Field on January 1st, 1958, producing 319 barrels of oil per day, no water, 20/64 inch choke, tubing pressure 200 pounds, gas-oil ratio 697 to 1. Presently, it is still flowing top allowable.

The gas-oil ratio is not changing appreciably on initial bottom hole pressure test. The initial bottom hole pressure of the well was determined to be 4,586 at field datum.

Q Would you give us the benefit, now, of your estimates with reference to production from the Wolfcamp formation?

A We have estimated that based on reservoir characteristics taken from log and core data that the Wolfcamp formation to be drained by this well, if the application is approved, will produce approximately 62,400 barrels of oil.

Q I'll call your attention to what has been marked as Exhibit 2, and ask if that represents the casing and cementing program which you expect to follow with reference to the dual completion in the Wolfcamp if the application is granted?

A That is right. That is a diagramatic sketch of the well showing the proposed dual completion installation, if acceptable.

Q Now, I believe you mentioned a Baker packer as the method to be used for the purpose of segregating the two formations?

A That is correct. We propose to set a Baker production packer at approximately 10,000 feet to segregate the Wolfcamp from Devonian production.

Q Now, referring to what has been marked as Exhibit No. 3, I will ask you if that is a log representing the producing interval of the two formations or indicating the producing interval?

A That is correct; that is a gamma ray neutron log of New Mexico "S" No. 1 on which has been marked in the top and bottom of

the Wolfcamp porosity, the location of the two zones to be perforated at approximately 9,850 feet; the top of the Devonian formation and the present Devonian perforation at approximately 13,400 feet.

Q Now, have you made a calculation designed to reflect the oil reserves and the economics insofar as those producing areas are concerned, with particular reference to the Wolfcamp?

A Yes, sir, we have. We have estimated that to drill, complete, and fully equip a wolfcamp well in this field, it would cost approximately \$202,900. To perform the same operation through dual completion of the present well, it would cost approximately \$52,900. Comparing both of those figures against the gross revenue from the 62,400 barrels of gross oil mentioned previously, we find that by drilling a new well, Magnolia would stand to lose \$10,700 as opposed to a gain of approximately \$139,000 gross revenue, should the present well be dually completed.

Q Now, referring again to Exhibit No. 1, which is the plat of the area, the Exhibit indicates the present dual completion of two offset wells operated by Gulf Oil Corporation. Do you know whether or not those were the subject of application and approving order by this Commission?

A That's correct. The south offset is Gulf's Lea State CL "A" State No. 1, a dual completion. Permission for that well was given by the Commission in Order R-1164 dated April 22nd, 1958. The east offset is Gulf's Lea State "R" No. 1, and permission for

dual completion of that well was given by the Commission in Order R-1166, dated April 22nd, 1958.

Q Is the method which you expect to use in connection with the proposed dual completion of your company's well similar to or identical with the method used in connection with the dual completion of these other two wells?

A Yes, it is.

Q In your opinion, Mr. Leach, will the favorable action of the Commission on this application result in the prevention of waste and the protection of correlative rights?

A Yes, sir, it will.

MR. SPERLING: That's all I have.

MR. NUTTER: Anyone else have any questions of Mr. Leach?

CROSS EXAMINATION

BY MR. NUTTER:

Q Now, Mr. Leach, I don't believe you gave an estimate of what the gravity and bottom hole pressure and GOR would be in the Wolfcamp. Do you have any idea?

A Yes, sir. On the Wolfcamp, it's 42 degrees API, a sour crude as opposed to Devonian, which is 52 degrees API and sweet crude. The gas-oil ratio from March, 1958, Engineering Committee report figures, the Wolfcamp Field average ratio was 2,311 to 1; Devonian Field ratio was 593 to 1; and bottom hole pressure, I've stated that our Devonian was 4,586 from drill stem test through the Wolfcamp. When we drilled this well, we found the shut-in

pressure there in the Wolfcamp, 3,530 PSI.

Q What was that again?

A 3,530.

Q The bottom hole pressure in the Devonian of 4586 is the current bottom hole pressure, or the initial --

Q That's the initial. We believe it to be very nearly current.

Q And your initial GOR was 697, and it is now 593?

A That is correct.

Q Mr. Leach, can you tell me where the top of the cement comes in these various casing strings on your sketch of the well?

A Yes, sir. Starting with the surface casing -- that cement has been circulated to the seven and five-eighths casing, and the cement top there is 7,565, and on the five and a half inch liner, top of cement there is 11,485, as so marked to the left of the picture.

Q And the seven inch is set at what depth?

A Seven and five-eighths is set at 10,428.

Q So there is an interval there from 10,478 to 11,485 where there is no cement?

A No, sir, the top of this five and a half inch liner at 10,238 has been squeezed off with 200 sacks of cement.

Q Does that fill that interval from --

A I do not believe it does.

Q --10,238 down to the top of the cement on the liner?

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A I do not believe it will fully fill that interval, no, sir. However, we know that there is a bond there; we did not run a survey through that.

MR. NUTTER: Are there any further questions of Mr. Leach? If not, he may be excused.

(Witness excused)

MR. SPERLING: We would like to ask the reception of Exhibits 1 through 3 at this time.

MR. NUTTER: Is there objection to the introduction of Magnolia's Exhibits 1 through 3? If not, they will be received. Does anyone have anything further they wish to offer in Case 1465? We will take the case under advisement.

C E R T I F I C A T E

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

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I, J. A. Trujillo, 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 in stenotype and reduced to typewritten transcript by me and/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal, this the 8<sup>th</sup> day of July, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph A. Trujillo  
Notary Public

My Commission Expires:

October 5, 1960

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1845 heard by me on 6-4, 1958.

James B. [Signature] Examiner  
New Mexico Oil Conservation Commission