

CASE 7223. SUN OIL COMPANY FOR A DUAL
COMPLETION AND SIMULTANEOUS DEDICATION,
LEA COUNTY, NEW MEXICO

CASE NO.

7223

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
22 April 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Sun Oil Company for a)
dual completion and simultaneous) CASE
dedication, Lea County, New Mexico.) 7223

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

W. Thomas Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

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I N D E X

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DAVID G. MENDOZA

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Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Nutter

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E X H I B I T S

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Applicant Exhibit One, Plat

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Applicant Exhibit Two, Chart

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Applicant Exhibit Three, Cross Section

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Applicant Exhibit Four, Decline Curve

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Applicant Exhibit Five, History

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Applicant Exhibit Six, History

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Applicant Exhibit Seven, Sketch

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Applicant Exhibit Eight, History

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Applicant Exhibit Nine, Sketch

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Applicant Exhibit Ten, Sketch

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Applicant Exhibit Eleven, Data

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Applicant Exhibit Twelve, Decline Curve

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Applicant Exhibit Thirteen, Calculation

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Applicant Exhibit Fourteen, Calculation

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Applicant Exhibit Fifteen, Data

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2 MR. NUTTER: We'll call next Case Number
3 7223.

4 MR. PADILLA: Application of Sun Oil
5 Company for a dual completion and simultaneous dedication,
6 Lea County, New Mexico.

7 MR. KELLAHIN: I'm Tom Kellahin of Santa
8 Fe, New Mexico, appearing on behalf of the applicant, and I
9 have one witness.

10
11 (Witness sworn.)
12

13 DAVID G. MENDOZA
14 being called as a witness and being duly sworn upon his oath,
15 testified as follows, to-wit:
16

17 DIRECT EXAMINATION

18 BY MR. KELLAHIN:

19 Q Mr. Mendoza, would you please give us
20 your name and occupation?

21 A My name is David G. Mendoza. I work
22 for Sun Oil Company in the capacity of petroleum engineer,
23 production engineer.

24 Q Mr. Mendoza, have you previously testi-
25 fied before the Division as a petroleum engineer?

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A. No, sir.

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Q. Would you explain to the Examiner when and where you obtained your engineering degree?

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A. I obtained a Bachelor of Science degree in petroleum engineering from the University of Texas at Austin in 19 -- December of 1978, and was employed by Sun Oil Company shortly after that.

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Q. Have you made a study of the data and facts surrounding Sun's application for approval of a dual completion and simultaneous dedication of acreage?

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A. Yes, sir.

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And have you prepared certain exhibits with regards to your presentation?

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A. Yes, sir.

MR. KELLAHIN: We tender Mr. Mendoza as an expert petroleum engineer.

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MR. NUTTER: Mr. Mendoza is qualified.

Q. Mr. Mendoza, let's turn to your packet of exhibits and direct your attention to Exhibit Number One, which is the plat. I'd like to have you identify for us the 160-acre proration unit, first of all.

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A.

Okay, that 160 acres unit is located in Section 1 of Township 22 South and Range 37 East, and --

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A. Further description of that.

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Q. And what is the Tubb Pool identified in this area? Has it got a name? Is there a pool name?

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A. It's the Tubb Oil and Gas Pool.

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3 A Tubb Field.

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18 Q In your opinion does the Tubb formation
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4 Q Okay.

5 MR. NUTTER: Now, Mr. Mendoza, before
6 you leave that exhibit, if I'm reading it right, that No. 4
7 Well right now is making about 270 Mcf a day, is that correct?

8 A That's correct.

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It is presently, I should point out, an oil well in the Granite Wash Wantz Field.

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Q And it currently produces only the --

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Q -- Granite Wash oil.

A Oil.

Q All right. How will you recomplete the well as a dual completion?

A That is shown in Exhibit Ten and that is our suggested completion downhole setup of the well.

Q You're going to bring the Tubb gas up the annulus?

1 A. Up the -- yes.

2 Q. And what's the composition of that gas?

3 Is it reasonably dry or does it make any kind of liquids or
4 hydrocarbons?

5 A. Yes, reasonably dry, yes. We produce
6 very negligible liquids at the wellhead. The only liquid
7 production that we actually get is from the gatherer when we
8 get it to their plant.

9 Q. That's based upon information derived
10 from the Tubb formation produced in the No. 4 Well?

11 A. Right.

12 Q. All right. You anticipate this well
13 will do similar to the No. 4 Well?

14 A. True.

15 Q. In your opinion is the method of com-
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17 ing practices with regards to dual completion?

18 A. True.

19 Q. All right. Let's go to Number Eleven
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Q -- significant pressure differential between Granite Wash and the Tubb formations in the No. 5 Well?

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Q Can you anticipate for me what you would estimate to be that pressure differential?

A 200 pounds, approximately, at the surface.

Q And that's well within the design limits of the packer to be set in that well?

A Yes.

Q All right, sir, let's go to Exhibit Number Twelve, is it?

A Yes.

Q All right.

A That is a pressure decline curve extrapolated out to determine initial gas in place for the No. 4 Well that we use in our calculations.

Q It looks like about 4.9 Bcf?

A True.

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2 Q And what quantity of gas have you re-
3 covered now?

4 A 3.5.

5 Q So there are some additional reserves
6 to be recovered?

7 A From our present well, yes.

8 Q All right, sir, let's turn to Exhibit
9 Number Thirteen for discussion and summarize for me what this
10 calculation is for.

11 A This calculation here is actually to
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15 Q Your back calculation shows that the
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18 A That's true.

19 Q And in your opinion are there additional
20 reserves underlying the 160-acre proration unit that are
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22 A That is true.

23 Q All right, sir. Let's go to Number
24 Fourteen.

25 A Okay, this is our calculations for

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2 recoverable reserves from our new well that we're proposing
3 to recomplete in the Tubb.

4 Q And what is that recoverable reserve
5 number?

6 A 858,000 Mcf.

7 Q All right. In your opinion are those
8 reserves that would be recovered from the new well in the Tubb
9 formation that would not otherwise be recovered from the No. 4
10 Well?

11 A That is true.

12 Q And Exhibit Number Fifteen.

13 A This is the given data that we have
14 used in our calculations.

15 Q And in your opinion, Mr. Mendoza, will
16 approval of the dual completion and the simultaneous dedication
17 of this acreage be in the best interest of conservation, the
18 prevention of waste, and the protection of correlative rights?

19 A Yes, I do.

20 Q Were Exhibits One through Fifteen pre-
21 pared by you or compiled under your direction?

22 A That's correct.

23 MR. KELLAHIN: We move the introduction
24 of Exhibits One through Fifteen.

25 MR. NUTTER: Exhibits One through Fifteen

will be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Mendoza, apparently this No. 5 Well must be located about 330 out of the corner down here?

A. That is true.

Q. Now have you obtained approval of a nonstandard location for the Tubb formation for this well?

A. No, not for the Tubb formation.

MR. KELLAHIN: It's only been approved as to the Granite Wash.

Q. Which is an oil well --

A. Right.

Q. -- so it's a standard location for that.

A. It would be a nonstandard location for --

Q. Now you realize you have to get approval as a nonstandard location as a gas well?

MR. KELLAHIN: Yes, sir, we understand that.

Q. And that is not included in the call of this hearing. Now, it would be eligible for administrative approval inasmuch as it was drilled deeper and one of the categories that can be approved administratively is recompletion

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of a well that was previously drilled to another horizon.

MR. KELLAHIN: That was our understanding
and that is our intent.

MR. NUTTER: Okay, are there further
questions of Mr. Mendoza? He may be excused.

Do you have anything further, Mr.
Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything
they wish to offer in Case Number 7223?

We'll take the case under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 7223
heard by me on 4/22 1981.

[Signature], Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

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EXAMINER HEARING

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BEFORE: Daniel S. Nutter

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9 have one witness.

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14 being called as a witness and being duly sworn upon his oath,
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Q. Have you made a study of the data and facts surrounding Sun's application for approval of a dual completion and simultaneous dedication of acreage?

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Q. And have you prepared certain exhibits with regards to your presentation?

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MR. NUTTER: Mr. Mendoza is qualified.

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A. Okay, that 160 acres unit is located in Section 1 of Township 22 South and Range 37 East, and --

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2 A. Further description of that.

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4 existing Tubb gas wells located within that proration unit?

5 A. The existing Tubb gas well will be in
6 Unit L, and No. 4 there. It should be highlighted in red on
7 the plat.

8 Q. The orange dot?

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10 attempting to simultaneous dedicate the unit with -- for.

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5 BY MR. NUTTER:

6 Q Mr. Mendoza, apparently this No. 5 Well
7 must be located about 330 out of the corner down here?

8 A That is true.

9 Q Now have you obtained approval of a
10 nonstandard location for the Tubb formation for this well?

11 A No, not for the Tubb formation.

12 MR. KELLAHIN: It's only been approved
13 as to the Granite Wash.

14 Q Which is an oil well --

15 A Right.

16 Q -- so it's a standard location for that.

17 A It would be a nonstandard location for --

18 Q Now you realize you have to get approval
19 as a nonstandard location as a gas well?

20 MR. KELLAHIN: Yes, sir, we understand
21 that.

22 Q And that is not included in the call of
23 this hearing. Now, it would be eligible for administrative
24 approval inasmuch as it was drilled deeper and one of the
25 categories that can be approved administratively is recompletion

1
2 of a well that was previously drilled to another horizon.

3 MR. KELLAHIN: That was our understanding
4 and that is our intent.

5 MR. NUTTER: Okay, are there further
6 questions of Mr. Mendoza? He may be excused.

7 Do you have anything further, Mr.
8 Kellahin?

9 MR. KELLAHIN: No, sir.

10 MR. NUTTER: Does anyone have anything
11 they wish to offer in Case Number 7223?

12 We'll take the case under advisement.

13
14 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 7223 heard by me on 4/22 1981.

[Signature], Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87503
Phone (505) 455-7409

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May 1, 1981

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

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

Re: CASE NO. 7223
ORDER NO. R-6667

Applicant:

Sun Oil Company

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD _____
Artesia OCD _____
Aztec OCD _____

Other

Dockets Nos. 15-81 and 16-81 are tentatively set for May 6 and 20, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 22, 1981

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

- CASE 7220: Application of McClellan Oil Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Connor Unit Area, comprising 5,120 acres, more or less, of State and Federal lands in Township 13 South, Range 29 East.
- CASE 7221: Application of Maddox Energy Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Flower Draw Unit Area, comprising 3,760 acres, more or less, of State lands in Townships 25 and 26 South, Range 28 East.
- CASE 7222: Application of GMW Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Starman Unit Area, comprising 2,803 acres, more or less, of State, Federal, and fee lands in Township 26 South, Range 35 East.
- CASE 7211: (Continued from April 8, 1981, Examiner Hearing)
Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the North Rock Lake State Unit Area, comprising 2,880 acres, more or less, of State land in Township 22 South, Range 35 East.
- CASE 7223: Application of Sun Oil Company for a dual completion and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of a well to be drilled in Unit M of Section 1, Township 22 South, Range 37 East, to produce oil from the Wantz-Granite Wash Pool and gas from the Tubb formation and to simultaneously dedicate the SW/4 of said Section 1 to said well and to its Lynch Christmas Com Well No. 4 in Unit L.
- CASE 7224: Application of S & I Oil Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in all formations underlying the SW/4 SW/4 of Section 2, Township 29 North, Range 15 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7225: Application of Knox Industries, Inc. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Morrow location of its Maddox Well No. 1 to be drilled 1980 feet from the South line and 660 feet from the West line of Section 12, Township 23 South, Range 34 East, Northeast Antelope Ridge Field, the S/2 of said Section 12 to be dedicated to the well.
- CASE 7226: Application of Enserch Exploration, Inc. for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Montoya formation in the interval from 7902 feet to 7930 feet in its Rader Well No. 2 in Unit E of Section 32, Township 5 South, Range 33 East.
- CASE 7227: Application of Alpha Twenty-One Production Company for an unorthodox gas well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard proration unit comprising the E/2 SW/4 and SW/4 SE/4 of Section 21, Township 21 South, Range 37 East, Hare-San Andres Gas Pool, to be dedicated to its Lansford Well No. 1 at an unorthodox location 660 feet from the South line and 1650 feet from the West line of said Section 21.
- CASE 7228: Application of Yates Petroleum Corporation for an unorthodox gas well location and simultaneous dedication, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Wolfcamp-Pennsylvanian location of its Rio Penasco "KD" Well No. 3 to be drilled 990 feet from the North line and 660 feet from the East line of Section 11, Township 19 South, Range 25 East, the N/2 of said Section 11 to be dedicated to said well and to applicant's Rio Penasco "MF" Federal Well No. 1 located in Unit F.

- CASE 7229: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox Morrow-Pennsylvanian location of its Sharp "QS" Com. Well No. 1 to be drilled 660 feet from the South and East lines of Section 4, Township 17 South, Range 26 East, the S/2 of said Section 4 to be dedicated to the well.
- CASE 7184: (Continued from March 11, 1981, Examiner Hearing)
Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 13, Township 17 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7230: Application of Caribou Four Corners, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Gallup formations underlying the S/2 SW/4 of Section 7, Township 29 North, Range 14 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7231: Application of Caribou Four Corners, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Gallup formations underlying the S/2 SE/4 of Section 11, Township 29 North, Range 15 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7232: Application of Caribou Four Corners, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Mesaverde and Gallup formations underlying the E/2 SW/4 of Section 12, Township 29 North, Range 15 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.
- CASE 7233: Application of Bass Enterprises Production Co. for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Montieth Well No. 3, the surface location of which is 2130 feet from the South line and 1980 feet from the East line of Section 13, Township 16 South, Range 36 East, Northeast Lovington-Pennsylvanian Pool, and drill said well in an easterly direction to bottom it not closer than 510 feet to the outer boundary of the dedicated unit, being the N/2 SE/4 of said Section 13.
- CASE 7234: Application of Getty Oil Company for a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Farming E Well No. 1-E located in Unit I of Section 2, Township 24 North, Range 6 West, to produce oil from the Gallup formation thru the casing-tubing annulus and gas from the Dakota formation thru tubing.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7223
Order No. R-6667

APPLICATION OF SUN OIL COMPANY
FOR A DUAL COMPLETION AND
SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 o'clock a.m. on April 22, 1981, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 30th day of April, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Sun Oil Company, seeks authority to complete its Walter Lynch Well No. 5, located in Unit M of Section 1, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Wantz-Granite Wash Pool through 2 7/8-inch tubing and gas from the Tubb formation through the casing-tubing annulus, separating the zones by means of a packer set at approximately 7300 feet, and to simultaneously dedicate the SW/4 of said Section 1 to said well and to its Lynch Christmas Com Well No. 4 in Unit L.

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

(4) That approval of the subject application will prevent waste and protect correlative rights, provided however, that said well should not be produced as a gas well in the Tubb

-2-

Case No. 7223

Order No. R-6667

formation until the unorthodox gas well location for said well has been approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Sun Oil Company, is hereby authorized to complete its Walter Lynch Well No. 5, located in Unit M of Section 1, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Wantz-Granite Wash Pool through 2 7/8-inch tubing and gas from the Tubb formation through the casing-tubing annulus, and to simultaneously dedicate the SW/4 of said Section 1 to said well and to its Lynch Christmas Com Well No. 4 in Unit L.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division 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 Annual Gas-Oil Ratio Test Period for the Wantz-Granite Wash Pool.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director


S E A L

fd/

WALTER LYNCH #5

TUBB GAS FIELD

Lea County, New Mexico

CASE #7223

April 22, 1981

David G. Mendoza

LYNCH CHRISTMAS #4

HISTORY

LOCATION: 440' FNL & 440' FWL, SW/4 (UNIT L), SEC. 1, T-22-S, R-37-E,
LEA COUNTY, NEW MEXICO.

ELEVATIONS: DF 3364' GL 3350.7'

8/1947: MID CONTINENT PETROLEUM CORP. DRILLED WELL TO A TD OF 7233'. WELL
WAS DEEMED AS A DRY HOLE AND IN SEPT. 1947 WELL WAS PLUGGED AND
ABANDONED.

LEFT IN HOLE: 13-3/8" 40# CSG SET @ 219' CMTD TO SURF W/250 SX
8-5/8" 32# CSG SET @ 2849' CMTD TO SURF @/1750 SX

6-7/1954: WELL WAS RE-ENTERED TO COMPLETE AS A DUAL GAS WELL (BLINEBRY/TUBB).
DRLD OUT CMT PLUGS TO 6600', RAN 5 1/2 13# & 17# CSG TO 6548'. CMTD
CSG W/450 SX, YOC @ 4605' BY TEMP. SUR. PERF TUBB FROM 6055-6138',
6000-6044', 15/32" HOLE, TOTAL 472 HOLES.
ACDZ TUBB W/500 GAL MUD ACID & 3000 GAL REGULAR ACID.
PERF BLINEBRY FROM 5535-5700', 5460-5515, 15/32" HOLE, TOTAL 880 HOLES.
ACDZ BLINEBRY W/500 GAL MUD ACID & 3000 GAL REGULAR ACID.

INITIAL PRODUCTION TEST: TUBB 4800 MCFPD ESTIMATED ON 3 HR TEST.
BLINEBRY 5040 MCFPD ESTIMATED ON 3 HR TEST.

CURRENT TEST: 3/28/81 0 BF 266 MCFPD

CUMULATIVE: DECEMBER 1980 3622.2 MMCF 22145 B0
DECEMBER 1979 3511.7 MMCF 22105 B0

(Tubb)

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Sun Oil Co EXHIBIT NO. 5
CASE NO. 7223

LYNCH CHRISTMAS #4T
TUBB PRODUCTION HISTORY

	1979 MCFPM	1980 MCFPM
JANUARY	9529	9441
FEBRUARY	8535	8595
MARCH	10745	8973
APRIL	10079	7744
MAY	9815	7793
JUNE	9896	10609
JULY	8998	8243
AUGUST	10490	10833
SEPTEMBER	9055	9774
OCTOBER	9997	9851
NOVEMBER	9728	9315
DECEMBER	10066	9308

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Sun Oil Co EXHIBIT NO. 6
CASE NO. 7223

WELL COMPLETION SKETCHES

SUN-8641-A

LYNCH CHRISTMAS #4
WELLBLINEBRY / Tubb
FIELD4-1-81
DATE☐ PRESENT COMPLETION☐ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

13^{3/8}" 40# CSQ SET @ 219'
CMTD TO SURF W/250 SX8^{5/8}" 32# CSQ SET @ 2849'
CMTD TO SURF W/1750 SX5^{1/2}" 13# & 17# CSQ SET
@ 6548', CMTD W/450 SX
PBT D @ 6477'

DRILLED OUT TO 6600'

TD @ 7233'

☐ ORIGINAL COMP.

WELL CLASS _____

DATA ON THIS COMPLETION

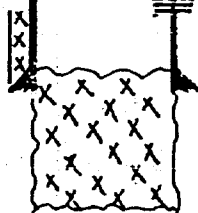
Blinebry perfs:
5535-5700, 5460-5515BAKER D-S PRODUCTION PKI
@ 5900' w/Type "E"
Locator tbg seal assembly
Tubb Perfs: 6055-6138,
6000-60456600-7233: MUD & CM
PLACED IN 1947

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Geo Oil Co EXHIBIT NO. 7

CASE NO. 7223



WALTER LYNCH #5

HISTORY

LOCATION: 330' FSL 330' FWL, UNIT M, SEC. 1, T-22-S, R-37-E, LEA COUNTY, NEW MEXICO

ELEVATION: GL 3350.3; KB 3362.7

SPUDDED 6-12-77 COMPLETED 7-27-77

TD 7897 PBD 7884

CASING: 8-5/8" 24# K-55 SET @ 1175 CMTD W/650 SX CIRC TO SURF.
5 1/2" 15.5# K-55 SET @ 7897 W/700 SX, CMT THRU 'DV' TOOL
W/530 SX @ 3994, TOP @ 1200 BY TEMP. SURVEY.

PERFORATED WANTZ GRANITE WASH 7338-7366 1JSP2F, 15 HOLES TOTAL, SWAB IN NATURAL

8-4-77 POTENTIAL TEST: FLWD UNDER PKR IN 24 HRS. 69 BO NO WTR 14/64 CHK
TP 420# 429.4 MCF GOR 6223/1 API GRAV 42.4°.

10-1-77: ADD NEW G.W. PERFS - PERFORATED G.W. 7380-90 1JSP2F, 11 HOLES TOTAL
BEFORE F 37 BO NO WTR, AFTER 38-44 BO NO WTR

2-9-78: JOB TO ACDZ LWR G.W. PERFS - PERFORATED G.W. 7380-90 ISOLATE NEW PERFS
& ACDZ W/250 GAL 15% MCA & 750 GAL 15% NEFEHCL

2-10-78: POTENTIAL TEST 24 HRS. F 79 BO, NO WTR, 412 MCF, GOR 5222/1
11/64 CHK, TP 360 - THRU BTM PERFS.

10-15-79: RAISED PKR TO 7303 AND PRODUCE ALL G.W. PERFS.

TEST: 3/19/81 14 BOPD 0 BWPD 253 MCF

CUMULATIVE: JANUARY, 1981: 27747 BO 1218 BW 197.1 MMCF

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Sun Oil Co EXHIBIT NO. 8
CASE NO. 7223

Walter Lynch #5
WELL

WANTZ: Granite Wash
FIELD

4-1-81
DATE

- ☒ PRESENT COMPLETION
☐ SUGGESTED COMPLETION

☐ ORIGINAL COMP.

WELL CLASS _____

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

8 5/8", 24#, K-55 CSG
CMTD @ 1175' with
650SX, CIRC 80 SX

TOC @ 1200' BY TEMP.
SURVEY

DV TOOL @ 3994', CMTD
thru with 530 SX

2 7/8", 6.5#, J-55 TBG

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Sundt Co EXHIBIT NO. 9

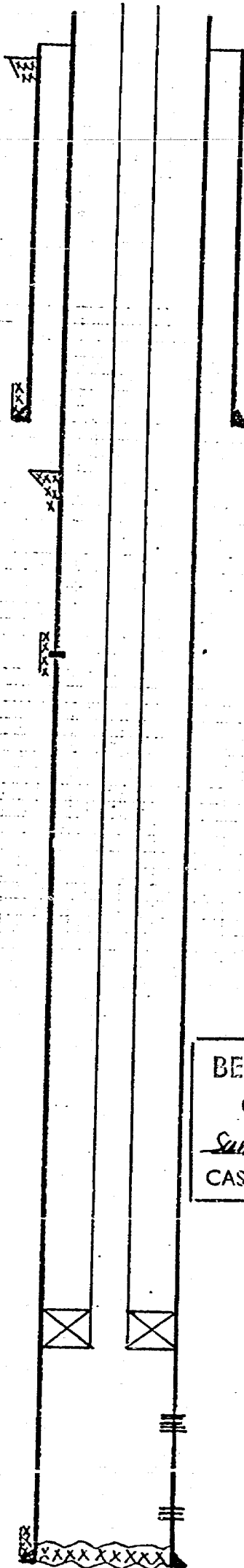
CASE NO. 7223

BAKER Model "R" PKR
@ 7303'

G.W. PERFS 7338-66
1 JSP2F, TOTAL 15 HOLES

G.W. PERFS 7880-90
1 JSP2F, TOTAL 11 HOLES

5 1/2", 15.5#, K-55 CSG
CMTD @ 7897' with 700SX



Tubb; Tubb #5C

Walter Lynch #5
WELL

WANTZ: Granite Wash #5T
FIELD

4-1-81

DATE



PRESENT COMPLETION



SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8", 24#, K-55 CSG
cmtd @ 1175' with
650SX, CIRC 80 SX

TOC @ 1200' BY TEMP.
SURVEY

DV TOOL @ 3994', cmtd
thru with 530 SX

5 1/2", 15.5#, K-55 CSG
cmtd @ 7897' with 700SX



ORIGINAL COMP.

WELL CLASS _____

DATA ON THIS COMPLETION

1.) OTIS PERMALACH PKR
1.94" ID

2.) OVERSHOT TBG. SEAL
divider 4.38" OD with
type "N" LANDING Nipple
1.791" ID

3.) CROSS OVER SUB
2 3/8" X 2 1/8"

4.) 1 JT 2 7/8" TBG

5.) "X6" sliding side door

6.) 2 7/8" J-SS TBG
TO SURFACE

Tubb Perfs: Aprox. @
6080-6150, 6020-6070

BEFORE EXAMINER NOTTER
OIL CONSERVATION DIVISION
SunOil Co EXHIBIT NO. 10
CASE NO. 7223

G.W. Perfs 7338-66
1 TSP2F, Total 15 holes

G.W. Perfs 7880-90
1 TSP2F, Total 11 holes

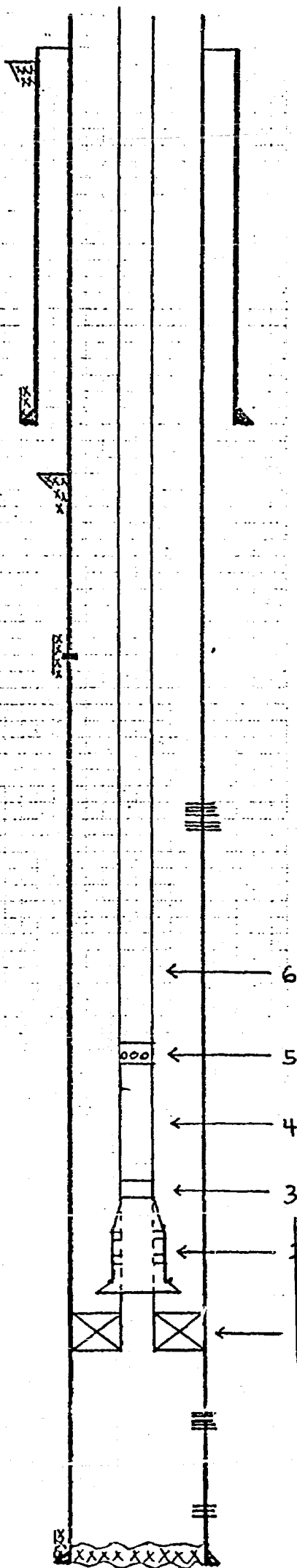


TABLE I

LYNCH CHRISTMAS GU #4T
TUBB GAS

DATE	SITP(psig)	GAS CUM. MCF	CUM. CONDENSATE (BBLs.)	BHP(psia)	Z
7-10-64	1337	1358194	19504	1568	.805
6-18-65	1406	1471270	19865	1648	.79
7-29-66	1131	1580029	20308	1329	.82
1-13-67	1315	1623436	20394	1543	.805
10-8-68	1350	1822391	21271	1583	.80
7-11-69	1123	1946236	21458	1320	.82
7-10-70	1027	2106992	21533	1209	.84
7-09-71	900	2302349	21596	1061	.85
5-05-72	854	2455644	21756	1008	.86
3-09-73	817	2595757	21833	965	.87
7-16-74	197	2824981	21842	245	.98
7-15-75	711	2963707	21865	842	.88
7-06-76	657	3097740	21972	780	.89
8-01-77	590	3230572	22002	702	.895
8-22-78	579	3353599	22094	689	.90
7-31-79	542	3463973	22094	646	.91
7-22-80	527	3570725	22126	629	.915

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

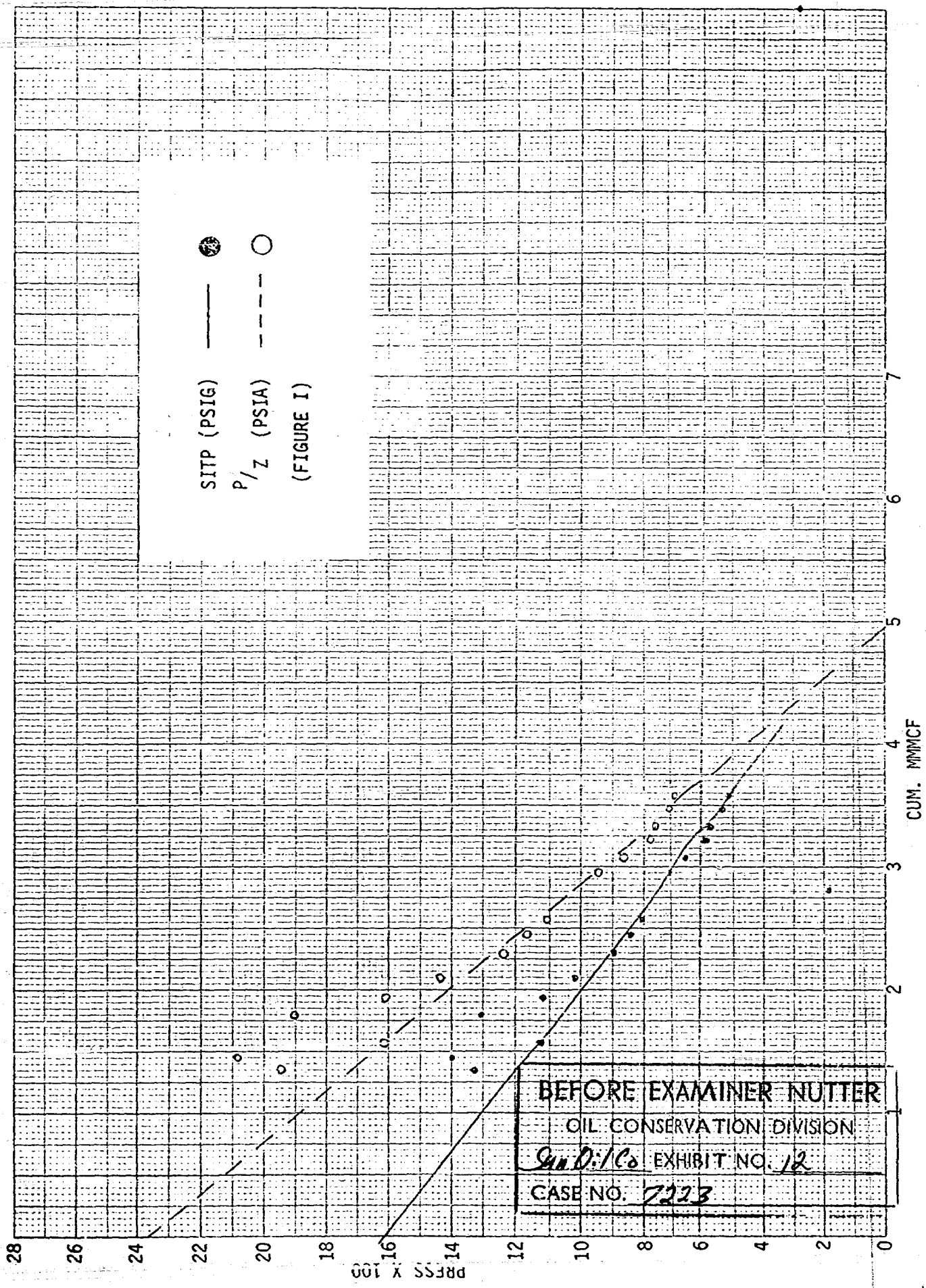
S. O. I. Co. EXHIBIT NO. //

CASE NO. 7223

10 X 10 TO 1/4 INCH 7 X 10 INCHES
KODAK SAFETY FILM & ESSER CO. MADE IN U.S.A.

46 1320

LYNCH CHRISTMAS #4T



CALCULATIONS

Solve for equation * * (acres) for present gas well Lynch Christmas #4 (Tubb)

$$* \frac{A \times H \times (1-SW) \times \phi \times 7758}{FVF} \times RF = NG$$

$$** A = \frac{FVF \times NG}{H \times (1-SW) \times \phi \times 7758 \times RF}$$

Step 1: Calculate for Formation Volume Factor (FVF) at initial bottom hole conditions.

$$FVF = \frac{15.025}{520} \frac{ZT}{P} = .0289 \frac{ZT}{P} \frac{Cu. Ft.}{SCF} = \frac{.0289}{5.6146} \frac{ZT}{P} = .005146 \frac{ZT}{P} \frac{Bbl.}{SCF}$$

$$FVF = 5.146 \frac{ZT}{P} \frac{Bbl.}{MSCF} = 5.146 \times \frac{(.79)(560)}{1867} = 1.219 \frac{Bbl.}{MSCF}$$

Step 2: Solve Gas Volume in Place (NG) from Material Balance Equation
"A": $P/Z = M \times NG + B$ (See Figure 1).

$$"B" = \frac{P}{Z} \text{ At } NG = 0 \quad B = \frac{1867}{.79} = 2363.29 \text{ PSIA}$$

$$"M" = \frac{P/Z}{NG} \text{ (Slope of straight line Fig. 1)}$$

$$\text{At } NG = 0 \quad P/Z = 2363.29 \text{ PSIA}$$

$$\text{At } NG = 3463973 \text{ MCF} \quad P/Z = 646/.91 = 709.89 \text{ PSIA (See Table 1 7/31/79)}$$

$$M = \frac{2363.29 - 709.89}{0 - 3463973} = -4.773 \times 10^{-4} \text{ PSIA/MSCF}$$

Solving EQ "A" for NG at $P/Z = 0$

$$NG = \frac{P/Z - B}{M} = \frac{2363.29}{-4.773 \times 10^{-4}} = 4951235.49 \text{ MCF}$$

Step 3: Solve for NG (Total Gas Recovered) at abandonment.
Abandonment conditions: $P_{ABN} = 75 \text{ PSIA}$, $Z_{ABN} = .99$

$$NG_{ABN} = \frac{P/Z - B}{M} = \frac{75/.99 - 2363.29}{-4.773 \times 10^{-4}} = 4792651.21 \text{ MCF}$$

$$\text{Recovery Factor } RF = \frac{NG_{ABN}}{NG} = \frac{4792651.21}{4951235.49} = 96.79\%$$

Step 4: Solve EQ **

$$A = \frac{1.219 \times 4792651.21}{128 \times (1-.35) \times .10 \times 7758 \times .9679}$$

A = 94 Acres drained by present gas well.

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

EXHIBIT NO. 13

CASE NO. 7223

Solve for NG (Recoverable Reserves) from new well

Step 1: Solve for FVF for new well at time of recompletion
 $P_{RC} = 597 \text{ PSIA}, Z_{RC} = .92$

$$FVF = 5.146 \times \frac{560(.92)}{597} = 4.441 \text{ Bbl/MSCF}$$

Step 2: Solve for NG (Total Gas in Place) using EQ * in undrained acreage
 $160 - 94 = 66 \text{ Acres}$

$$NG (\text{in place}) = \frac{66 \times 128 \times (1 - .35) \times .10 \times 7758}{4.441} = 959,260 \text{ MCF}$$

Step 3: Solve for FVF at abandonment
Abandonment conditions: $P_{ABN} = 75 \text{ PSIA}, Z_{ABN} = .99$

$$FVF_{ABN} = 5.146 \times \frac{560(.99)}{75} = 38.039 \text{ Bbl/MSCF}$$

Step 4: Solve for Gas Volume left in place at abandonment using EQ *

$$NG (\text{left}) = \frac{66 \times 128 \times (1 - .35) \times .10 \times 7758}{38.039}$$

$$NG (\text{left}) = 111,992 \text{ MCF}$$

$$\begin{aligned} NG (\text{Recoverable Reserves}) &= NG (\text{in place}) - NG (\text{left @ ABN}) \\ &= 959,260 - 111,992 \end{aligned}$$

Recoverable Reserves = 850,000 MCF
from New Well

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Sun Oil Co EXHIBIT NO. 14

CASE NO. 7223

GIVEN DATA (MEASURED OR CALCULATED)

Reservoir Temperature $T = 100^{\circ} \text{ F}$
Specific Gravity $SG = .65$
Average Porosity $\phi = 10\%$
Water Saturation $SW = 35\%$
Net Height $H = 128 \text{ ft.}$
Initial Bottom Hole Pressure $P = 1867 \text{ PSIA}$
Initial Deviation Factor at P and T $Z = .79$
Bottom Hole Pressure at Abandonment $PABN = 75 \text{ PSIA}$
Deviation Factor at Abandonment $ZABN = .99$

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Sun Oil Co EXHIBIT NO. 15

CASE NO. 7223

Walter Lynch #5
WELL

WANTZ: Granite Wash
FIELD

4-1-81
DATE

☒ PRESENT COMPLETION

☐ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8", 24#, K-55 CSG
cmtd @ 1175' with
650SX, CIRC 80 SX

TOC @ 1200' BY TEMP.
SURVEY

DV TOOL @ 3994', cmtd
thru with 530 SX

5 1/2", 15.5#, K-55 CSG
cmtd @ 7897' with 700SX

☐ ORIGINAL COMP.

WELL CLASS _____

DATA ON THIS COMPLETION

2 7/8", 6.5#, J-55 TBG

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

San Oil Co EXHIBIT NO. 9

CASE NO. 7223

BAKER Model "R" pkr
@ 7303'

G.W. PERFS 7338-66
1JSP2F, Total 15 holes

G.W. PERFS 7880-90
1JSPE, Total 11 holes

Walter Lynch #5
WELL

Tubb; Tubb # 5C

WANTZ: Granite Wash #5T
FIELD

4-1-81

DATE

☐ PRESENT COMPLETION

☒ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8", 24#, K-55 CSG
cmtd @ 1175' with
650SX, CIRC 80 SX

TOC @ 1200' BY TEMP.
SURVEY

DV TOOL @ 3994', cmtd
thru with 530 SX

5 1/2", 15.5#, K-55 CSG
cmtd @ 7897' with 700SX

☐ ORIGINAL COMP.

WELL CLASS _____

DATA ON THIS COMPLETION

1.) OTIS PERMALACH PKR
1.94" ID

2.) OVERSHOT TBG. SEAL
divider 4.38" OD with
type "N" LANDING Nipple
1.791" ID

3.) CROSS OVER SUB
2 3/8" X 2 7/8"

4.) 1 JT 2 7/8" TBG

5.) "XO" sliding Side Door

6.) 2 7/8" J-SS TBG
TO SURFACE

Tubb PERFS: APPROX: @
6080-6150, 6020-6070

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Sun Oil Co. EXHIBIT NO. 10

CASE NO. 7223

G.W. PERFS 7338-66

1 JSP2F, TOTAL 15 HOLES

G.W. PERFS 7880-90

1 JSP2F, TOTAL 11 HOLES

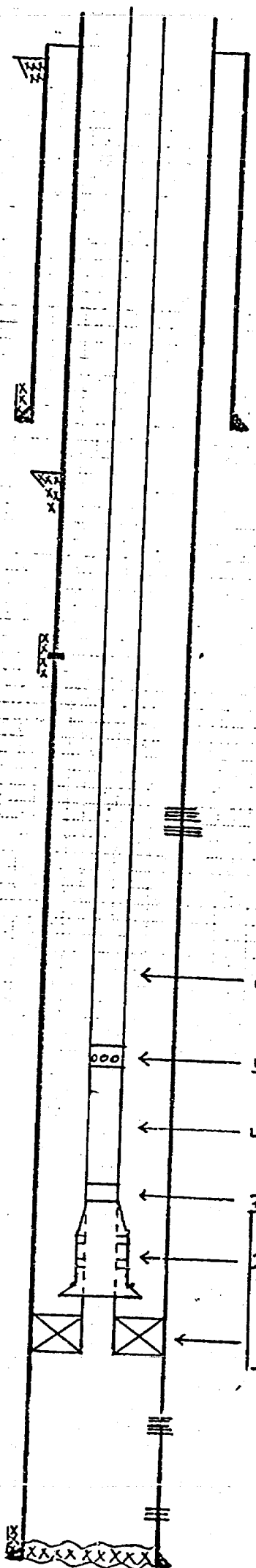


TABLE I

LYNCH CHRISTMAS GU #4T
TUBB GAS

DATE	SITP(psig)	GAS CUM. MCF	CUM. CONDENSATE (BBLS.)	BHP(psia)	Z
7-10-64	1337	1358194	19504	1568	.805
6-18-65	1406	1471270	19865	1648	.79
7-29-66	1131	1580029	20308	1329	.82
1-13-67	1315	1623436	20394	1543	.805
10-8-68	1350	1822391	21271	1583	.80
7-11-69	1123	1946236	21458	1320	.82
7-10-70	1027	2106992	21533	1209	.84
7-09-71	900	2302349	21596	1061	.85
5-05-72	854	2455644	21756	1008	.86
3-09-73	817	2595757	21833	965	.87
7-16-74	197	2824981	21842	246	.98
7-15-75	711	2963707	21865	842	.88
7-06-76	657	3097740	21972	780	.89
8-01-77	590	3230572	22002	702	.895
8-22-78	579	3353599	22094	689	.90
7-31-79	542	3463973	22094	646	.91
7-22-80	527	3570725	22126	629	.915

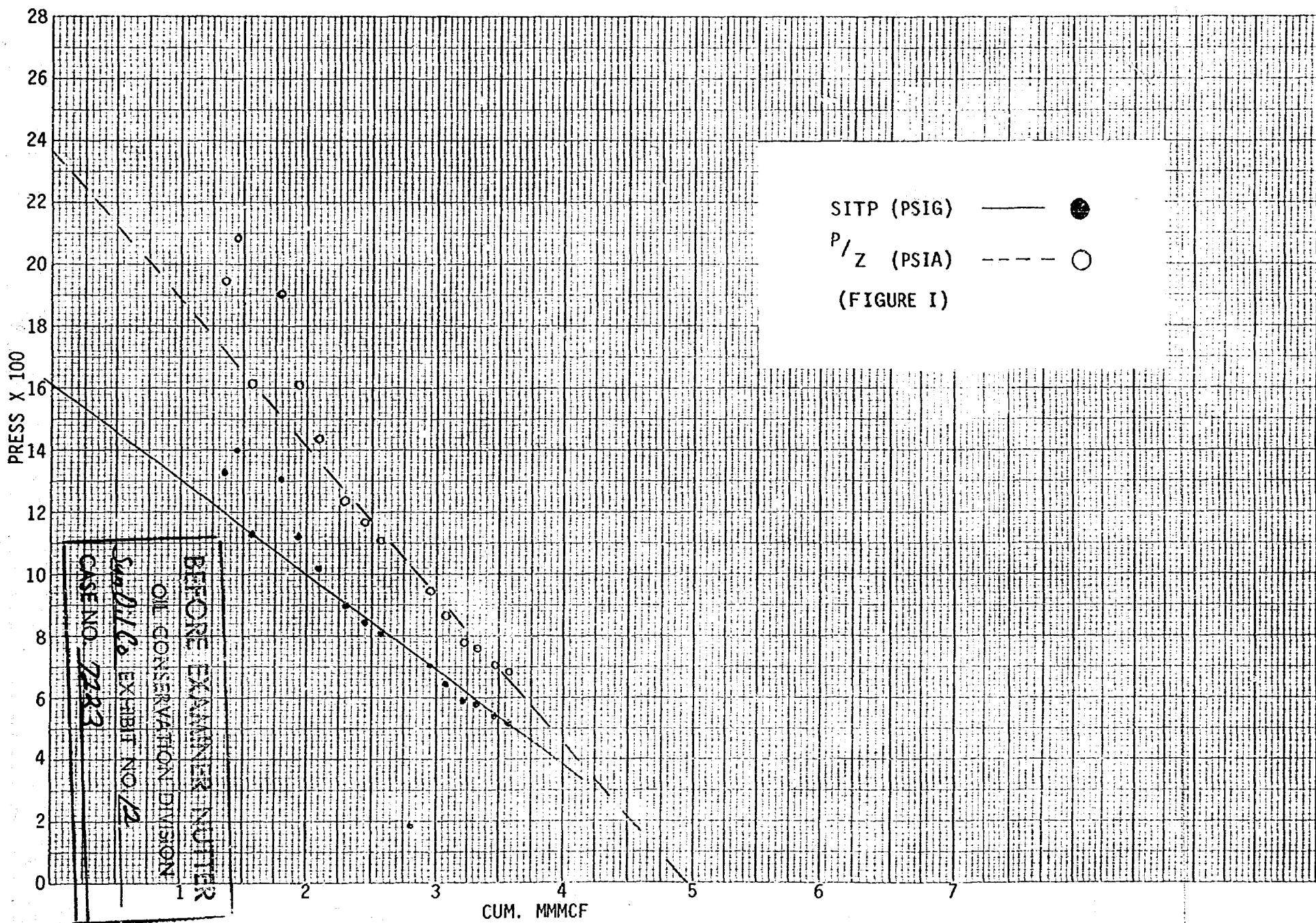
BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

EXHIBIT NO. //

CASE NO. 7223

LYNCH CHRISTMAS #4T



CALCULATIONS

Solve for equation * * (acres) for present gas well Lynch Christmas #4 (Tubb)

$$* A \times H \times (1-SW) \times \phi \times 7758 \times RF = NG$$

$$** A = \frac{FVF \times NG}{H \times (1-SW) \times \phi \times 7758 \times RF}$$

Step 1: Calculate for Formation Volume Factor (FVF) at initial bottom hole conditions.

$$FVF = \frac{15.025}{520} \frac{ZT}{P} = .0289 \frac{ZT}{P} \frac{Cu. Ft.}{SCF} = \frac{.0289}{5.6146} \frac{ZT}{P} = .005146 \frac{ZT}{P} \frac{Bbl.}{SCF}$$

$$FVF = 5.146 \frac{ZT}{P} \frac{Bbl.}{MSCF} = 5.146 \times \frac{(.79)(560)}{1867} = 1.219 \text{ Bbl./MSCF}$$

Step 2: Solve Gas Volume in Place (NG) from Material Balance Equation
"A": $P/Z = M \times NG + B$ (See Figure 1).

$$"B" = \frac{P}{Z} \text{ At } NG = 0 \quad B = \frac{1867}{.79} = 2363.29 \text{ PSIA}$$

$$"M" = \frac{P/Z}{NG} \text{ (Slope of straight line Fig. 1)}$$

$$\text{At } NG = 0 \quad P/Z = 2363.29 \text{ PSIA}$$

$$\text{At } NG = 3463973 \text{ MCF} \quad P/Z = 646/.91 = 709.89 \text{ PSIA (See Table 1 7/31/79)}$$

$$M = \frac{2363.29 - 709.89}{0 - 3463973} = -4.773 \times 10^{-4} \text{ PSIA/MSCF}$$

Solving EQ "A" for NG at $P/Z = 0$

$$NG = \frac{P/Z - B}{M} = \frac{2363.29}{-4.773 \times 10^{-4}} = 4951235.49 \text{ MCF}$$

Step 3: Solve for NG (Total Gas Recovered) at abandonment.
Abandonment conditions: $P_{ABN} = 75 \text{ PSIA}$, $Z_{ABN} = .99$

$$NG_{ABN} = \frac{P/Z - B}{M} = \frac{75/.99 - 2363.29}{-4.773 \times 10^{-4}} = 4792651.21 \text{ MCF}$$

$$\text{Recovery Factor } RF = \frac{NG_{ABN}}{NG} = \frac{4792651.21}{4951235.49} = 96.79\%$$

Step 4: Solve EQ **

$$A = \frac{1.219 \times 4792651.21}{128 \times (1-.35) \times .10 \times 7758 \times .9679}$$

A = 94 Acres drained by present gas well.

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

San Diego Co EXHIBIT NO. 13

CASE NO. 7223

Calculations
Page 2

Solve for NG (Recoverable Reserves) from new well

Step 1: Solve for FVF for new well at time of recompletion
 $P_{RC} = 597 \text{ PSIA}, Z_{RC} = .92$

$$FVF = 5.146 \times \frac{560(.92)}{597} = 4.441 \text{ Bbl/MSCF}$$

Step 2: Solve for NG (Total Gas in Place) using EQ * in undrained acreage
 $160 - 94 = 66 \text{ Acres}$

$$NG (\text{in place}) = \frac{66 \times 128 \times (1 - .35) \times .10 \times 7758}{4.441} = 959,260 \text{ MCF}$$

Step 3: Solve for FVF at abandonment
Abandonment conditions: $P_{ABN} = 75 \text{ PSIA}, Z_{ABN} = .99$

$$FVF_{ABN} = 5.146 \times \frac{560(.99)}{75} = 38.039 \text{ Bbl/MSCF}$$

Step 4: Solve for Gas Volume left in place at abandonment using EQ *

$$NG (\text{left}) = \frac{66 \times 128 \times (1 - .35) \times .10 \times 7758}{38.039}$$

$$NG (\text{left}) = 111,992 \text{ MCF}$$

$$NG (\text{Recoverable Reserves}) = NG (\text{in place}) - NG (\text{left @ ABN})$$
$$= 959,260 - 111,992$$

Recoverable Reserves = 850,000 MCF
from New Well

BEFORE EXAMINER NUTTER

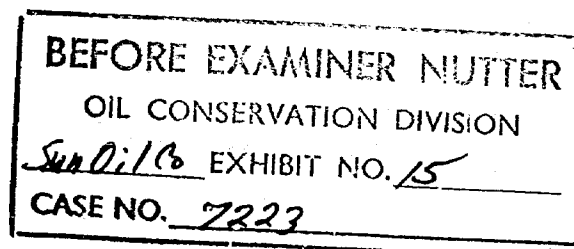
OIL CONSERVATION DIVISION

Sun Oil Co. EXHIBIT NO. *14*

CASE NO. *7223*

GIVEN DATA (MEASURED OR CALCULATED)

Reservoir Temperature $T = 100^{\circ} \text{ F}$
Specific Gravity $SG = .65$
Average Porosity $\phi = 10\%$
Water Saturation $SW = 35\%$
Net Height $H = 128 \text{ ft.}$
Initial Bottom Hole Pressure $P = 1867 \text{ PSIA}$
Initial Deviation Factor at P and T $Z = .79$
Bottom Hole Pressure at Abandonment $PABN = 75 \text{ PSIA}$
Deviation Factor at Abandonment $ZABN = .99$



WALTER LYNCH #5

TUBB GAS FIELD

Lea County, New Mexico

CASE #7223

April 22, 1981

David G. Mendoza

LYNCH CHRISTMAS #4

HISTORY

LOCATION: 440' FNL & 440' FWL, SW/4 (UNIT L), SEC. 1, T-22-S, R-37-E,
LEA COUNTY, NEW MEXICO.

ELEVATIONS: DF 3364' GL 3350.7'

8/1947: MID CONTINENT PETROLEUM CORP. DRILLED WELL TO A TD OF 7233'. WELL
WAS DEEMED AS A DRY HOLE AND IN SEPT. 1947 WELL WAS PLUGGED AND
ABANDONED.

LEFT IN HOLE: 13-3/8" 40# CSG SET @ 219' CMTD TO SURF W/250 SX
8-5/8" 32# CSG SET @ 2849' CMTD TO SURF @/1750 SX

6-7/1954: WELL WAS RE-ENTERED TO COMPLETE AS A DUAL GAS WELL (BLINEBRY/TUBB).
DRILD OUT CMT PLUGS TO 6600', RAN 5 1/2 13# & 17# CSG TO 6548'. CMTD
CSG W/450 SX, TOC @ 4605' BY TEMP. SUR. PERF TUBB FROM 6055-6138',
6000-6045', 15/32" HOLE, TOTAL 472 HOLES.
ACDZ TUBB W/500 GAL MUD ACID & 3000 GAL REGULAR ACID.
PERF BLINEBRY FROM 5535-5700', 5460-5515, 15/32" HOLE, TOTAL 880 HOLES.
ACDZ BLINEBRY W/500 GAL MUD ACID & 3000 GAL REGULAR ACID.

INITIAL PRODUCTION TEST: TUBB 4800 MCFPD ESTIMATED ON 3 HR TEST.
BLINEBRY 5040 MCFPD ESTIMATED ON 3 HR TEST.

CURRENT TEST: 3/28/81 0 BF 266 MCFPD

CUMULATIVE: DECEMBER 1980 3622.2 MMCF 22145 BO
DECEMBER 1979 3511.7 MMCF 22105 BO

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
<i>Sun Oil Co</i> EXHIBIT NO. <u>5</u>
CASE NO. <u>7223</u>

LYNCH CHRISTMAS #4T
TUBB PRODUCTION HISTORY

	1979 MCFPM	1980 MCFPM
JANUARY	9529	9441
FEBRUARY	8535	8595
MARCH	10745	8973
APRIL	10079	7744
MAY	9815	7793
JUNE	9896	10609
JULY	8998	8243
AUGUST	10490	10833
SEPTEMBER	9055	9774
OCTOBER	9997	9851
NOVEMBER	9728	9315
DECEMBER	10066	9308

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Sun Oil Co EXHIBIT NO. 6

CASE NO. 1223

WELL COMPLETION SKETCHES
SUN-8841-A

LYNCH CHRISTMAS #4
WELL

BLINEBRY / Tubb
FIELD

4-1-81
DATE

- ☐ PRESENT COMPLETION
☐ SUGGESTED COMPLETION

☐ ORIGINAL COMP.

WELL CLASS _____

PERMANENT WELL BORE DATA

DATA ON THIS COMPLETION

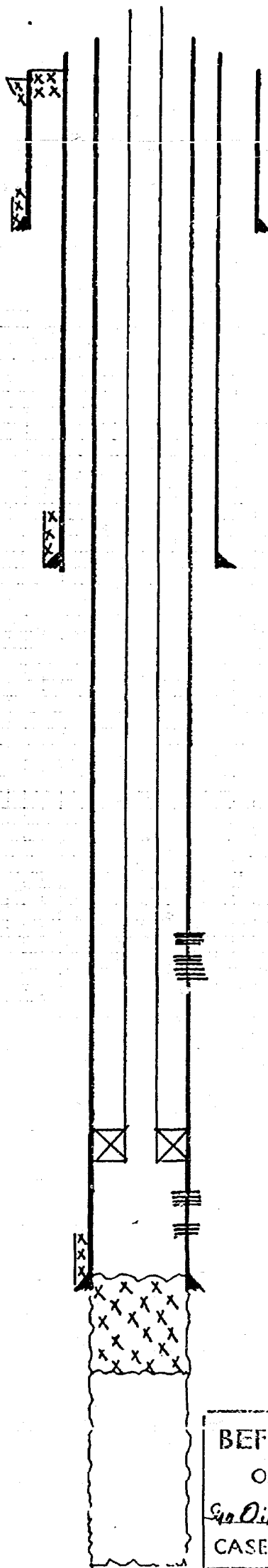
13 3/8", 40# CSG SET @ 219'
CMTD TO SURF W/ 250 SX

8 5/8", 32# CSG SET @ 2849'
CMTD TO SURF W/ 1750 SX

5 1/2", 13# & 17# CSG SET
@ 6548', CMTD W/ 450 SX
PBTD @ 6477'

Drilled out to 6600'

TD @ 7233'



BLINEBRY PERFS:
5535-5700, 5460-5515

BAKER O-S PRODUCTION PKI
@ 5900' w/ Type "E"
Locator tbg seal assembly
Tubb Perfs: 6055-6138,
6000-6045

6600-7233' mud & cm.
placed in 1947

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Geo Oil Co EXHIBIT NO. 7

CASE NO. 7223

WALTER LYNCH #5

HISTORY

LOCATION: 330' FSL 330' FWL, UNIT M, SEC. 1, T-22-S, R-37-E, LEA COUNTY, NEW MEXICO

ELEVATION: GL 3350.3; KB 3362.7

SPUDDED 6-12-77 COMPLETED 7-27-77

TD 7897 PBDT 7884

CASING: 8-5/8" 24# K-55 SET @ 1175 CMTD W/650 SX CIRC TO SURF.
5 1/2" 15.5# K-55 SET @ 7897 W/700 SX, CMT THRU 'DV' TOOL
W/530 SX @ 3994, TOP @ 1200 BY TEMP. SURVEY.

PERFORATED WANTZ GRANITE WASH 7338-7366 1JSP2F, 15 HOLES TOTAL, SWAB IN NATURAL

8-4-77 POTENTIAL TEST: FLWD UNDER PKR IN 24 HRS. 69 BO NO WTR 14/64 CHK
TP 420# 429.4 MCF GOR 6223/1 API GRAV 42.4°.

10-1-77: ADD NEW G.W. PERFS - PERFORATED G.W. 7380-90 1JSP2F, 11 HOLES TOTAL
BEFORE F 37 BO NO WTR, AFTER 38-44 BO NO WTR

2-9-78: JOB TO ACDZ LWR G.W. PERFS - PERFORATED G.W. 7380-90 ISOLATE NEW PERFS
& ACDZ W/250 GAL 15% MCA & 750 GAL 15% NEFEHCL

2-10-78: POTENTIAL TEST 24 HRS. F 79 BO, NO WTR, 412 MCF, GOR 5222/1
11/64 CHK, TP 360 - THRU BTM PERFS.

10-15-79: RAISED PKR TO 7303 AND PRODUCE ALL G.W. PERFS.

TEST: 3/19/81 14 BOPD 0 BOPD 253 MCF

CUMULATIVE: JANUARY, 1981: 27747 BO 1218 BW 197.1 MMCF

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

Su. Oil Co. EXHIBIT NO. 8

CASE NO. 7223

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

KELLAHIN and KELLAHIN
Attorneys at Law
500 Don Gaspar Avenue
Post Office Box 1769
Santa Fe, New Mexico 87501

Telephone 982-4285
Area Code 505

March 24, 1981

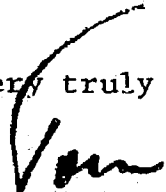
Mr. Joe Ramey
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Sun Oil Company
Walter Lynch Well No. 5
Wantz Granite Wash Field

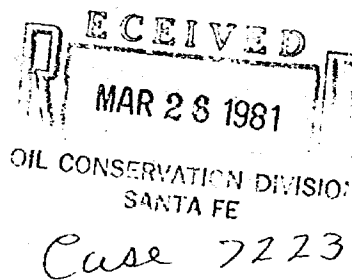
Dear Joe:

Please set the enclosed application for hearing
on April 22, 1981.

Very truly yours,


W. Thomas Kellahin

WTK:jm
Enclosure
cc: Mr. J.T. Harris



STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF SUN OIL COMPANY FOR DUAL
COMPLETION AND SIMULTANEOUS DED-
ICATION OF ACREAGE, LEA COUNTY
NEW MEXICO

RECEIVED
MAR 28 1981
OIL CONSERVATION DIVISION
SANTA FE

A P P L I C A T I O N

Case 7223

Comes now SUN OIL COMPANY, by and through its attorneys and applies to the Oil Conservation Division of New Mexico for authority to drill a gas-oil dual completion and to simultaneously dedicate the subject well to acreage already dedicated to a producing Tubb well, and in support would show:

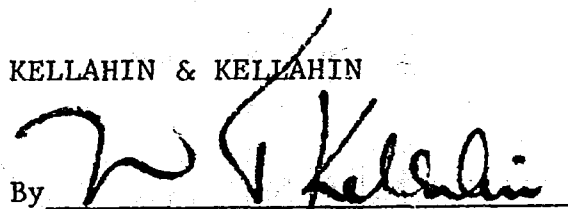
1. Applicant is the owner of the right to drill on the SW/4 of Section 1, T22S, R37E, Lea County New Mexico.
2. Applicant is the operator of an existing well, Lynch Christmas Com. No. 4 well located in Unit L of Section 1, which currently produces gas from the Tubb formation and to which the SW/4 of Section 1 is dedicated.
3. Application proposes to drill a second well in the SW/4 of said Section 1, to be located in Unit M, said well to be a gas-oil Dual Completion with the oil production from the Wantz Granite Wash Field and the gas production from the Tubb formation.
4. The second well is necessary in order to effectively and efficiently drain the Tubb formation underlying the SW/4 of this section.

5. Approval of this application will produce gas and oil that could not otherwise be produced, will prevent waste, protect correlative rights, and will be in the interests of conservation.

WHEREFORE, applicant requests that this application be set for hearing and that after notice and hearing an order be entered granting the application as requested.

KELLAHIN & KELLAHIN

By


W. Thomas Kellahin
P.O. Box 1769
Santa Fe, New Mexico 87501
(505) 982-4285

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF SUN OIL COMPANY FOR DUAL
COMPLETION AND SIMULTANEOUS DED-
ICATION OF ACREAGE, LEA COUNTY
NEW MEXICO



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Case 7223

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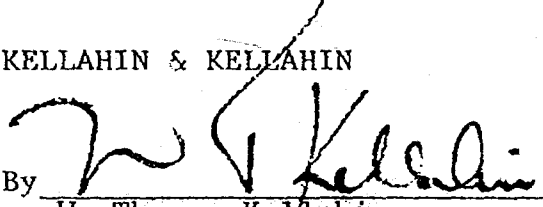
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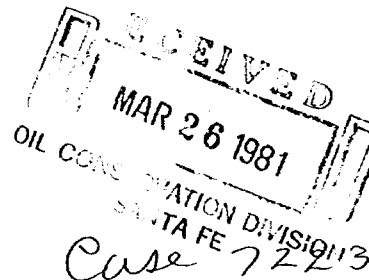
KELLAHIN & KELLAHIN

By


W. Thomas Kellahin
P.O. Box 1769
Santa Fe, New Mexico 87501
(505) 982-4285

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION
OF SUN OIL COMPANY FOR DUAL
COMPLETION AND SIMULTANEOUS DED-
ICATION OF ACREAGE, LEA COUNTY
NEW MEXICO



A P P L I C A T I O N

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KELLAHIN & KELLAHIN

By


W. Thomas Kellahin

P.O. Box 1769

Santa Fe, New Mexico 87501

(505) 982-4285

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7223

Order No. R- 6667

APPLICATION OF SUN OIL COMPANY
FOR A DUAL COMPLETION AND SIMULTANEOUS DEDICATION, LEA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 o'clock a.m. on
April 22, 1981, at Santa Fe, New Mexico, before
Examiner Daniel S. Nutter.

NOW, on this day of April, 1981, the
Division Director, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Sun Oil Company
seeks authority to/complete its ~~its~~ ^{its Walter Lynch Well No. 5, located} ~~a well to be drilled in Unit M~~
~~well No. xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ of Section 1, Town-
ship 22 South, Range 37 East, NMPM, Lea
County, New Mexico, ^{as a dual completion (conventional)} ~~as a completion (conventional)~~ to
^{oil} produce ~~gas~~ from the Wantz-Granite Wash Pool and gas from the
Tubb formation and to simultaneously dedicate the SW/4 of said
Section 1 to said well and to its Lynch Christmas Com Well No. 4 in
Unit L, ~~Lea~~

paper set at approximately
7500 feet,

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

(4) That approval of the subject application will prevent waste and protect correlative rights, *provided however, that said well should not be produced as a gas well in the Tubb formation*

IT IS THEREFORE ORDERED: *until the unorthodox gas well location for said well has been approved.*

(1) That the applicant, Sun Oil Company is hereby authorized to complete ~~its~~ *its Walter Lynch Well No. 5, located*

~~Well No. 5~~ *located* in Unit M of Section 1,

Township 22 South, Range 37 East, NMPM, Lea

County, New Mexico, as a dual completion (conventional) ~~(combination)~~

oil to produce gas from the Wantz-Granite Wash Pool and gas from the Tubb formation *through 2 1/2 inch tubing* and to simultaneously dedicate the SW/4 of

said Section 1 to said well and to its Lynch Christmas Com Well No. 4 in Unit L.

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

PROVIDED FURTHER, that the applicant shall take pressure leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Wantz-Granite Wash Pool.

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

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