

CASE 6962: BTA OIL PRODUCERS FOR SPECIAL
POOL RULES AND POOL EXTENSION, LEA
COUNTY, NEW MEXICO

Case No.

6962

Application

Transcripts

Small Exhibits

ETC



BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87201
800 867-3434

August 6, 1980

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

Re: CASE NO. 6962
ORDER NO. P-6424

Applicant:

RTA Oil Producers

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/Ed

Copy of order also sent to:

Hobbs OCD _____ y
Artesia OCD _____ y
Aztec OCD _____

Other

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. 6962
Order No. R-6424

APPLICATION OF BTA OIL PRODUCERS
FOR SPECIAL POOL RULES AND POOL
EXTENSION, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 9, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 4th day of August, 1980, 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, BTA Oil Producers, has completed its 7909 JV-P Well No. 1 located 1650 feet from the North line and 2510 feet from the West line of Section 18, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, as a gas well in the Devonian formation, producing through perforations from 14,660 feet to 14,708 feet.

(3) That said well is located approximately 1.5 miles south of the Continental Oil Co. Bell Lake Unit Well No. 6, which is in Unit 0 of Section 6 of said Township 23 South, Range 34 East, and for which the North Bell Lake-Devonian Gas Pool was created and defined by the Division March 1, 1962, comprising the SE/4 of said Section 6.

-2-

Case No. 6962

Order No. R-6424,

(4) That the applicant seeks the extension of said North Bell Lake Devonian Gas Pool to include its 7909 JV-P Well No. 1, and further seeks the promulgation of special rules and regulations for said pool including a provision for 640-acre spacing and specified well locations.

(5) That the evidence presently available indicates that said Bell Lake Unit Well No. 6 and applicant's 7909 JV-P Well No. 1 are indeed both producing from a single common source of supply in the Devonian formation, and that said North Bell Lake-Devonian Gas Pool should be extended to take in said 7909 JV-P Well No. 1.

(6) That the evidence further indicates that one well in said North Bell Lake-Devonian Gas Pool is capable of draining 640 acres and that 640-acre spacing and proration units should be established for said pool with well locations for future wells to be no closer than 1650 feet to the outer boundary of the unit, nor closer than 330 feet to any quarter-quarter section line.

(7) That an order embodying the above findings is in the interest of conservation, will not cause but will prevent waste, will not impair but will protect correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the North Bell Lake-Devonian Gas Pool in Lea County, New Mexico, as heretofore created, defined, and described, is hereby extended to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM

Section 6: N/2 and SW/4

Section 7: All

Section 18: All

(2) That Special Rules and Regulations for said North Bell Lake-Devonian Gas Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS
FOR THE
NORTH BELL LAKE-DEVONIAN GAS POOL

RULE 1. Each well completed or recompleted in the North Bell Lake-Devonian Gas Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another designated Devonian gas pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

-3-
Case No. 6962
Order No. R-6424

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

RULE 3. The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Division Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Director has received the application.

RULE 4. Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to a deeper horizon. All operators offsetting the production unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all

-4-

Case No. 6962
Order No. R-6424

operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the North Bell Lake-Devonian Gas Pool or in the Devonian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before September 1, 1980.

(2) That, pursuant to Paragraph A. of Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, existing wells in the North Bell Lake-Devonian Gas Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 640 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the North Bell Lake-Devonian Gas Pool or in the Devonian formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) 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 stated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY,
Director

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
9 July 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil Producers for special pool rules and pool extension, Lea County, New Mexico. CASE 6962

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

SALLY W. BOYD, C.S.R.

Rt. 1 Box 195-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

INDEX

STEVE PAYTON

Direct Examination by Mr. Kellahin 3

Cross Examination by Mr. Nutter 12

STEVE SALMON

Direct Examination by Mr. Kellahin 14

Cross Examination by Mr. Nutter 22

EXHIBITS

Applicant Exhibit One, Summary 4

Applicant Exhibit Two, Structure Map 4

Applicant Exhibit Three, Plat 6

Applicant Exhibit Four, Cross Section 9

Applicant Exhibit Five, Rate Curve 15

Applicant Exhibit Six, Tabulation 16

Applicant Exhibit Seven, Rate/Cum Curve 19

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 451-7409

1 MR. NUTTER: Call next Case Number 6962.

2 MR. PADILLA: Application of BTA Oil
3 Producers for special pool rules and pool extension, Lea
4 County, New Mexico.

5 MR. KELLAHIN: Tom Kellahin of Santa Fe,
6 New Mexico, appearing on behalf of the applicant, and I have
7 two witnesses.

8
9 (Witnesses sworn.)

10
11 STEVE PAYTON

12 being called as a witness and having been duly sworn upon his
13 oath, testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q Would you please state your name, by whom
18 you're employed, and in what capacity?

19 A My name is Steve Payton. I'm employed by
20 BTA Oil Producers of Midland. I've worked with BTA a year
21 and a half and I've testified before the New Mexico Oil Con-
22 servation Commission before.

23 Q Mr. Payton, you're a geologist, are you not?

24 A Yes, I'm a geologist.

25 Q And you've testified previously before

SALLY W. BOYD, C.S.R.

RL 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 the Division in that capacity?

2 A Yes.

3 Q And as a geologist have you made a study
4 of and prepared certain exhibits for this application?

5 A Yes.

6 MR. KELLAHIN: We tender Mr. Payton as an
7 expert geologist.

8 MR. NUTTER: Mr. Payton is qualified.

9 Q Would you please refer to what we've
10 marked as Exhibit Number One and identify that and tell us
11 what the applicant is seeking?

12 A Exhibit Number One is a summary of the
13 application. BTA asks for an extension of the Bell Lake-
14 Devonian North Gas Pool to include Section 6, 7, and 19 of
15 Township 23 South, Range 34 East, Lea County, New Mexico.

16 BTA asks for the promulgation of special
17 pool rules to include 640-acre spacing and well locations
18 within a spacing unit no closer than 1650 feet from the outer
19 boundary lines; no closer than 330 feet from a governmental
20 quarter-quarter section.

21 Q Would you turn to what we've marked as
22 Exhibit Number Two and identify that?

23 A Exhibit Number Two is a structure map on
24 the top of the Devonian; scale 1 inch equals 2000 feet with
25 100-foot contours.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-11

Sanita Fe, New Mexico 87501

Phone (505) 455-7405

1 BTA's Bell Lake No. 1 is located in Section
2 18, Township 23 South, Range 34 East, Lea County, New Mexico.

3 The field limits are determined by the
4 gas/water contact, which is shown by a blue dashed line at a
5 subsea depth of 11,350.

6 The red solid line running north and south
7 would be discussed later in connection with the cross section.

8 The nearest current producing Devonian
9 gas well is the Continental Bell Lake Unit Well No. 6, located
10 a mile and a half to the north of BTA's well.

11 Q That Continental well in Section 6 is the
12 discovery well for this pool?

13 A Yes.

14 Q And when was it completed, do you remem-
15 ber?

16 A 1961.

17 Q The Bell Lake-Devonian Pool rules have
18 been established since approximately that date?

19 A Yes. I believe it has 160-acre spacing.

20 Q All right. Do you have a recollection as
21 to what the order number is and the date of the order that
22 established the 160-acre spacing for this pool?

23 A The existing rules for the subject pool
24 were established on March 1st, 1962, by the Division Order
25 Number R-2187, and include a provision for 160-acre spacing.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 113-B

Santa Fe, New Mexico 87501

Phone (505) 435-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-3

Santa Fe, New Mexico 87501

Phone (505) 435-7409

1 Q Now when did you complete the BTA well in
2 Section 18?

3 A June of 1980.

4 Q What is the status of the Continental
5 well in Section 18 that is south of your well?

6 A This is the Continental Bell Lake No. 10
7 and it's currently plugged.

8 MR. NUTTER: 10 or 9?

9 MR. KELLAHIN: No. 9, the one in Section
10 18.

11 A Oh, okay, in 18. That's a Bone Springs
12 well and it is currently plugged.

13 Q All right, continuing on down to the south
14 in Section 19, then, what's the status of that Continental
15 well there?

16 A It's a Devonian gas well which has been
17 plugged.

18 Q Okay. You propose to have what acreage
19 included in the Bell Lake North Devonian Pool?

20 A Sections 6, 7, and 19.

21 MR. NUTTER: What did you say the No. 9
22 in Section 18 produced from?

23 A Bone Spring.

24 MR. NUTTER: Bone Spring.

25 Q Let's go to Exhibit Number Three, Mr. Pay-

1 ton, and have you identify that for me.

2 A Exhibit Number Three is a producing field
3 map. BTA's well, Bell Lake Well No. 1, is indicated by the
4 red dot.

5 The Mid Bell Lake Gas Field is located
6 one mile south of BTA's Bell Lake No. 1. The field made 900-
7 million cubic feet of gas from one well, which is now plugged.

8 The Bell Lake North Gas Devonian Field
9 has produced 23.9 Bcf from one well. It is presently making
10 1.7-million cubic feet of gas per day, plus 780 barrels of
11 water per day.

12 Q Taking Exhibit Three, would you identify,
13 then, for me which of these Devonian pools are spaced on 640
14 acres?

15 A Okay. The Bell Lake South Gas Devonian
16 Field is located 3-1/2 miles to the south of BTA's well. It
17 is an abandoned field. The field made a combined cumulative
18 of 17.8 Bcf from two wells which are now plugged.

19 The Antelope Ridge Gas Devonian Field is
20 located 3-1/2 miles to the southeast and is currently pro-
21 ducing two wells and one well has been plugged in that field.
22 The three wells have made a combined cumulative of 29.1 Bcf
23 as of April, 1980. The two wells presently average 550 Mcf
24 per day, plus 67 barrels of water per day, and both of these
25 fields are on 640-acre spacing.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

Q All right, let's go back to Exhibit Number Two for a couple questions.

How have you determined what acreage ought to be included within the Bell Lake-Devonian Pool?

A All right. The limits are defined by the gas/water contacts and by the fault to the east and the fault to the south of our well.

Q How did you determine the existence of those faults?

A By seismic.

Q Okay.

A The gas/water contacts were determined by tests performed on the wells both north and south of BTA's well, which I will get into later.

Q Is Section 18 controlled entirely by BTA Oil Producers?

A Yes. We have the entire 640-acre. We have partners in the drilling of that well.

Q That 640-acre section is available for dedication to one well?

A Yes.

Q And what is the ownership situation for the Continental well in Section 6?

A That's in the Bell Lake Unit and I'm sure there are a number of people within that unit.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

San Jose, New Mexico 87501

Phone (505) 451-7409

1 Q All right. Show me what indicates the --

2 A Okay.

3 Q -- limits of the Bell Lake Unit --

4 A Yes.

5 Q -- operated by Continental.

6 A There are nine sections within the unit,
7 shown by the dashed dark line. This is north of BTA's well,
8 in Section 18.

9 Q All right, sir, let's go to your Exhibit,
10 the cross section. That's Exhibit Number Four.

11 A Exhibit Number Four is a cross section
12 showing the three wells in the area, shown by -- shown by
13 the red line in the structure map, running from north to
14 south, and the cross section runs from west to east. The line
15 of section between the wells is shown by from A to A'. The
16 top of the Devonian is correlated across Section, and the
17 gas/water contact is shown as a black horizontal line at
18 -11,350 to the north and shown in red at -11,265 to the south.
19 A fault is shown separating the well to the south. That
20 would be the Continental Bell Lake No. 10.

21 The gas/water contact in the Bell Lake
22 North Field is determined by test results on the Continental
23 Bell Lake Well No. 6 in Section 6.

24 The Devonian was perforated in this well
25 at separate intervals from 14,568, 14,829, as shown in green

1 on the cross section.

2 The lowermost water-free drill stem test
3 was made at an interval of 14,747 to 14,835, recovering gas
4 to surface at a rate of 5.7-million cubic feet of gas per
5 day, plus two barrels of mud, and three barrels of distillate.

6 This well was completed in 1959 with a
7 calculated open flow of 30.5-Million cubic feet of gas per
8 day, plus 36 barrels of distillate.

9 In 1971 a through tubing bridge plug was
10 set at 14,750. A separate gas/water contact in the Mid Bell
11 Lake Field to the South is determined by test results on the
12 Continental Bell Lake Well NO. 10 in Section 19.

13 Two drill stem tests were run with both
14 recovering water. The Lowermost drill stem test from 14,820
15 to 14,890 recovered 890 feet of gas-cut mud, plus 2540 feet
16 of gas-cut sulphur water.

17 The second drill stem test from 14,728
18 to 14,890 recovered 211 Mcf per day, plus 2220 feet of highly
19 gas-cut sulphur water.

20 The Devonian was perforated from 14,747
21 to 14,811 and acidized with 15,000 gallons. This well was
22 completed flowing 3.2-million cubic feet of gas per day, plus
23 160 barrels of water per day, in March, 1965. It was plugged
24 in December, 1974.

25 The BTA Bell Lake Well No. 1 in the center

SALLY W. BOYD, C.S.R.

Rt. 1 Box 91-B

Santa Fe, New Mexico 87501

Phone (505) 557-7409

1 of the cross section was drilled to total depth of 14,727.
2 The lowermost drill stem test covered the entire Devonian
3 formation and was -- that was penetrated, and recovered gas
4 at 169 Mcf per day, plus 3000 feet of water blanket, and 925
5 feet of drilling fluid.

6 The Devonian was perforated from 14,660
7 to 14,708, and acidized with 10,000 gallons -- or 300 gallons.
8 It flowed Mcf per day. An additional acid treatment was made
9 with 10,000 gallons and the well was completed flowing 4.8-
10 million cubic feet a day, plus 85 barrels of load water in
11 1980, May of 1980.

12 The well is currently being worked on.
13 The tubing is currently being worked on but last production
14 was 4.8-million cubic feet a day, plus 12 barrels of conden-
15 sate per day and 2 barrels of water per day.

16 Q Based upon your study of the geology,
17 Mr. Payton, do you have an opinion as to whether or not one
18 well can adequately and effectively develop a 640-acre space
19 unit?

20 A Yes, I believe so.

21 Q Were Exhibits One through Four prepared
22 by you or compiled under your direction and supervision?

23 A Yes, they were compiled by myself and
24 Steve Salmon.

25 Q In your opinion, Mr. Payton, will approval

SALLY W. BOYD, C.S.R.

Rt. 1 Box 190-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 or this application be in the best interests of conservation,
2 prevention of waste, and the protection of correlative rights?

3 A Yes, it will.

4 Q In your opinion will approval of this
5 application avoid the drilling of unnecessary wells?

6 A Yes.

7 MR. KELLAHIN: That concludes our examin-
8 ation of Mr. Payton.

9
10 CROSS EXAMINATION

11 BY MR. NUTTER:

12 Q Mr. Payton, it would appear from the cross
13 section, Exhibit Number Four, that your well is perforated
14 in the uppermost portion of the Devonian only and that pro-
15 ducing interval would be the equivalent of the top two sec-
16 tions in the Bell Lake No. 6, is that it?

17 A Yes.

18 Q And your well wasn't drilled any deeper
19 in the Devonian then, was it?

20 A That's right.

21 Q And you perforated almost down to your
22 TD, then.

23 A Yes. One foot above the TD, I believe.

24 Q Why wasn't the well drilled any further
25 into the Devonian?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

Santa Fe, New Mexico 87501

Phone (505) 435-7409

1 A We were concerned about the gas/water
2 contact. We wanted to stay as high above it as we could be-
3 cause the offset wells had been producing for a number of
4 years and that was the main reason, just for staying out of
5 the water.

6 Q Well, it would appear that one of the
7 better zones, according to DST's in the Bell Lake No. 6, was
8 this interval down at about a -11,300, and you missed that
9 by 300 or 400 feet.

10 A That's right.

11 Q Do you have reason to believe the gas/
12 water contact has moved in this structure?

13 A Yes, we believe it has. The original gas/
14 water contact was at -11,350. We took that from the bottom
15 perms, and since then a bridge plug has been set above that
16 point and it's hard to define an exact gas/water contact in
17 that well, but it has moved up since original completion.

18 Q Well, now, was the purpose of this work-
19 over in 1971, where they put the tubing bridge plug in at
20 14,750, was the purpose of that to come up above the water,
21 Gas/water contact?

22 A I would assume so.

23 Q Had this well started making considerable
24 water?

25 A I don't have the production. Steve Salmo

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-11

Santa Fe, New Mexico 87501

Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7400

1 will present that, but yes, it had been making water.
2 Q And it originally hadn't.
3 A It was completed water-free and it did
4 start making water, yes.
5 Q And so to stay away from that water you
6 just drilled into the top of the Devonian and stopped.
7 A Yes.
8 Q Now this other well over here on the
9 cross section, I guess is immaterial because it's on the other
10 side of the fault, anyway, but apparently it was just com-
11 pleted in the uppermost portion of the Devonian, also.
12 A That's correct.
13 Q And it was abandoned with a very low cum-
14 ulative recovery.
15 A That's right.
16 Q Less than a billion.
17 MR. NUTTER: Are there any further ques-
18 tions of the witness? He may be excused.
19
20 STEVE SALMON
21 being called as a witness and having been duly sworn upon his
22 oath, testified as follows, to-wit:
23
24 DIRECT EXAMINATION
25 BY MR. KELLAHIN:

1 Q Mr. Salmon, would you please state your
2 name, by whom you're employed, and in what capacity?

3 A My name is Steve Salmon. I'm employed,
4 and have been employed, by BTA Oil Producers as a petroleum
5 engineer for the last nine years.

6 Q Have you previously testified before the
7 Division as a petroleum engineer?

8 A Yes, I have.

9 Q And pursuant to your employment by BTA
10 as a petroleum engineer have you made a study of and prepared
11 certain exhibits of this application?

12 A Yes, I have.

13 MR. KELLAHIN: We tender Mr. Salmon as an
14 expert petroleum engineer.

15 MR. NUTTER: Mr. Salmon is qualified.

16 Q Mr. Salmon would you turn to what we've
17 marked as Applicant Exhibit Number Five and identify that
18 exhibit for us?

19 A Yes. Exhibit Number Five is a rate/time
20 producing curve for the Continental Bell Lake Unit 2 Well No.
21 6. The gas and water rate scale is on the lefthand side of
22 the page. This is a log scale on the lefthand side. The
23 time scale going from 1961 through 1980 is on the bottom of
24 the page. The solid curve is -- represents the gas production.
25 The dashed curve represents water production.

SALLY W. BOYD, C.S.R.

RL 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 You'll notice the water production only
2 goes back through 1974. The well was producing water prior
3 to this but this data was compiled from the New Mexico Oil
4 and Gas Engineering Committee Annual Report, and prior to
5 1974 water production was not carried in the annual report on
6 gas wells.

7 The Continental well started producing,
8 as shown by the graph, in 1961, and in March of 1980 was still
9 producing 53,385 Mcf per month, which would be 1.7-million
10 cubic feet, or MMCF, per day.

11 It was also producing in March 24,180
12 barrels of water, or on a daily basis this would be 780 bar-
13 rels per day.

14 Exhibit Six, I'd like to go ahead and
15 mention at this time, is a tabular backup to the graph, Ex-
16 hibit Five. And the cumulative production is shown on the
17 last page of this exhibit, Exhibit Six.

18 Q Mr. Salmon, what's the drive mechanism
19 in this reservoir?

20 A This reservoir appears to be essentially
21 a waterdrive. As our geological witness testified, it was
22 initially completed water-free, with the gas/water contact
23 at -11,350 feet.

24 After this time it started making water
25 and did have the through tubing bridge plug set, as shown

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 on our cross section.

2 In discussing the well with the Continental
3 engineer in Hobbs, he didn't have a number for what the well
4 was making prior to the bridge plug set or after, but he did
5 find a memo in their file that showed that after setting the
6 bridge plug they hoped to obtain a water production of 200
7 barrels per day or less, so I assume it was making substan-
8 tially more than this prior to setting the bridge plug.

9 You'll notice on the --

10 MR. NUTTER: What time of 19 -- that was
11 set in 1971?

12 A. Yes, it was set in 1971 and, again, he
13 wouldn't -- he couldn't find an exact date in their files,
14 except that it was set, but I assume it would be in September
15 and October when the gas production of the well was down.
16 It looks like it was down part of those months. But looking
17 at the gas production curve, you can see very little effect
18 from the decline rate of the gas production due to setting
19 that bridge plug.

20 MR. NUTTER: It didn't change the gas
21 production at all.

22 A. Right. So, personally, just based on
23 the fact it didn't change the gas production, I doubt if it
24 was very effective in shutting off the water. But, like I
25 say, I have no data on what the water production was before

SALLY W. BOYD, C.S.R.

Rt. 1 Box 192-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 and after, so I can't say that conclusively.

2 Q What was the original pressure in the
3 reservoir, Mr. Salmon?

4 A The original reservoir pressure was 6400
5 psi. Continental is not required to report annual shut-in
6 tubing pressure, but again in discussing this well with the
7 Continental engineer, he found a memo in their file where the
8 well was shutin about four years ago, and the memo said that
9 the shutin tubing pressure indicated a bottom hole pressure
10 in the range of 6000 to 6200 psi.

11 Q When was your BTA well drilled?

12 A Well, we completed it in June of 1980.

13 Q And what was the initial pressure on that
14 well?

15 A The initial shutin tubing pressure, based
16 on 181-hour shut-in after just a very small flow period, was
17 4630 psi. This yielded a calculated bottom hole pressure of
18 6072 psi.

19 Q What conclusion do you reach from the
20 pressure information?

21 A Well, we feel that this is an indication
22 of some pressure depletion due to the existing producing well.
23 A strictly depletion drive reservoir of this size would show
24 a substantially greater drop in this than the 300 to 400 psi
25 pressure drop we've seen, though this confirms our -- the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 113-B

Santa Fe, New Mexico 87501

Phone: (505) 431-7409

1 production on the well that it's essentially a waterdrive
2 reservoir with possibly some pressure depletion, though the
3 pressure depletion is very minor.

4 Q Have you made any pressure -- I'm sorry,
5 any reservoir estimates for this Continental No. 2 Well --
6 No. 6 well?

7 A Yes.

8 Q Is that Exhibit Number Seven?

9 A Right. Before we get to that, though, I
10 attempted to extrapolate the rate/time graph that was Exhibit
11 Number Five to obtain a reserve -- a decline curve reserve
12 for this well; however, the curve is curving up, which indi-
13 cates that any extrapolation made from that curve would pro-
14 bably be on the low side, because each year, as it flattened
15 out more, you'd get a higher reserve number for the gas.

16 MR. NUTTER: You've got infinite reserves

17 A Well, we made another exhibit to take care
18 of this. This is our Exhibit Number Six, to get rid of a --
19 or to get a curve that -- a plot that didn't curve. We
20 plotted a rate/cum curve.

21 Q And that is Exhibit Number Seven?

22 A Yes. Okay, this is Exhibit Seven. Okay
23 this is Exhibit Seven.

24 As you can see, the points plotted on
25 this curve form a pretty good straight line. These points

SALLY W. BOYE, C.S.R.

Rt. 1 Box 193-3

Santa Fe, New Mexico 87501

Phone (505) 455-7409

1 are the year end rates for each year, and we tried to take
2 December of each year, but if December was abnormal, we took
3 what a normal rate for December would have been for each
4 year.

5 The last point shown on the graph is March
6 of 1980.

7 Extending this line out to a rate of
8 10-million cubic feet per month, which would figure out to
9 just over 300 Mcf per day, you get -- you would come up with
10 a reserve of 52 Bcf for the well.

11 MR. NUTTER: And what rate of production
12 would that have been at?

13 A At the 52 Bcf it would be 10-million
14 cubic feet per month, or that would be approximately -- that
15 would be 10 MMCF per month, which would figure out to be ap-
16 proximately 330 Mcf per day.

17 MR. NUTTER: Okay.

18 Q Based upon your study, Mr. Salmon, do you
19 have an opinion as to the drainage area for the Continental
20 well?

21 A Yes, I do.

22 A pore volume reserve, based on the
23 structure map, which was presented as Exhibit Two, and the
24 log calculations based on the Continental Bell Lake Unit 2
25 Well No. 6, indicates a gas in place of 82 Bcf. The 52 Bcf

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-II
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 reserves from the rate/cum extrapolation would yield a 63
2 percent recovery factor for the total field, and this would
3 be a reasonable recovery factor for a waterdrive reservoir.
4 Therefor, we feel like the well is draining essentially the
5 whole reservoir.

6 Q When you speak of the whole reservoir,
7 what area are you talking about?

8 A Okay, if you'll refer to Exhibit Two,
9 we're talking about all of the area bounded by the -11,350
10 foot gas/water contact and the fault, which are essentially
11 Sections 6, 7, and 18 of Township 23 South, Range 34 East,
12 and some minor peripheral area outside of that.

13 MR. NUTTER: Now that's the area you say
14 would have the 82 billion cubic feet of gas in place?

15 A Yes.

16 Now, in total areawise, this would amount
17 to 3272 acres, or it's roughly equivalent to 5.1 sections.

18 Q In your opinion, then, Mr. Salmon, could
19 one well in this particular pool have the potential to drain
20 and develop a 640-acre spacing and proration unit?

21 A Yes, I feel like it very definitely
22 would.

23 Q In your opinion will the changing of the
24 pool rules to provide for 640-acre spacing avoid the drilling
25 of unnecessary wells?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 A Yes, I think it will.

2 Q In your opinion will the approval of this
3 application be in the best interests of conservation, prevention
4 of waste, and the protection of correlative rights?

5 A Yes, I do.

6 Q Were Exhibits Five, Six, and Seven pre-
7 pared by you or compiled under your direction and supervision?

8 A Yes. They were -- Steve Payton and I
9 together prepared the exhibits for the hearing and we kind
10 of intermixed our work on the various exhibits.

11 MR. KELLAHIN: That concludes our examin-
12 ation. We tender Exhibits One through Seven.

13 MR. NUTTER: Exhibits One through Seven
14 will be admitted in evidence.

15
16 CROSS EXAMINATION

17 BY MR. NUTTER:

18 Q Mr. Salmon, Continental has been sitting
19 there with that well since 1961 and has produced almost 24
20 billion cubic feet out of it. Do you know whether they have
21 any plans at this time to do any additional drilling in Sec-
22 tion 7 now that you've brought your well in in 18?

23 A Well, we approached them requesting a
24 farmout on Section 7. They did, as a matter of interest,
25 Continental did have the acreage on the south half of Section

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-3
Santa Fe, New Mexico 87501
Phone (505) 435-7409

18 and we do have a farmout from them on the south half of Section 18.

In discussing this with them, we requested a farmout from them on Section 7. They said that they wouldn't give us a farmout because it was tied up with the drilling unit, and they liked the drilling possibilities on it.

Now, we, as far as I know, we never -- we have not asked them pointblank, are you going to develop it. I don't know what their gas price is or anything of this nature, and it could be that this could interfere with their drilling it.

If it was our lease, we'd recommend drilling, but Continental, I don't know. I can't say for sure.

Q What did your No. 1 Well in Section 18 cost?

A It cost approximately \$2.4 million.
Now, our gas price on that well is \$2.25 an Mcf.

Q And your well currently makes -- or on a test made about 4-1/2 million a day, is that it?

A This is correct, yes.

Q Do you have a connection for your well yet?

A Yes. It is connected to Transwestern

SALLY W. BOYD, C.S.F.

R. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7499

1 and prior to developing a tubing leak, was on production for
2 several days.

3 Q And you have it out now making repairs?

4 A Yes. We have pulled the tubing and found
5 some holes in the tubing and now we're going to run the tubing
6 back in.

7 Q How long had it produced?

8 A It went on production -- actually it went
9 on May the 28th, so actually it went on production in May,
10 I guess I should say; went on production May the 28th and
11 produced up until about three to four days ago.

12 Q You had about a month's production?

13 A So it's about a month's production, yes.

14 Q Did it show any characteristics change
15 or anything during that time?

16 A No, it was producing fairly stable during
17 that month. The only thing we did notice was initially we
18 were making some load water. This load water has disappeared
19 and it was apparently at least partially due to the tubing
20 leak, and then water that we had lost while we were completing
21 the well.

22 Q Now this 4-1/2 million a day, is that the
23 amount it will produce into the pipeline?

24 A Yes. In fact, the tubing pressure on
25 that well is substantiall higher than pipeline pressure. The

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7419

1 pipeline pressure is roughly 900 pounds. The flowing tubing
2 pressure on the latest test we have available, which was just
3 before we shut it in for the work, was 3950 psi, and the
4 tubing pressure while we had been flowing it has increased.
5 It did increase as the water, you know, decreased.

6 Q That's flowing tubing pressure.

7 A That's flowing tubing pressure.

8 MR. NUTTER: Are there any further ques-
9 tions of Mr. Salmon? He may be excused.

10 Do you have anything further, Mr. Kellahin?

11 MR. KELLAHIN: No, sir.

12 MR. NUTTER: Does anyone have anything
13 they wish to offer in Case Number 6962?

14 We'll take the case under advisement.

15
16 (Hearing concluded.)
17
18
19
20
21
22
23
24
25

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

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 C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6962 heard by me on 7/9 1980.

[Signature], Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7499

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
9 July 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil Producers for
special pool rules and pool extension,
Lea County, New Mexico.

CASE
6962

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

SULLY W. BOYD, C.S.R.

Rt. 1 Box 192-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I N D E X

STEVE PAYTON

Direct Examination by Mr. Kellahin	3
Cross Examination by Mr. Nutter	12

STEVE SALMON

Direct Examination by Mr. Kellahin	14
Cross Examination by Mr. Nutter	22

E X H I B I T S

Applicant Exhibit One, Summary	4
Applicant Exhibit Two, Structure Map	4
Applicant Exhibit Three, Plat	6
Applicant Exhibit Four, Cross Section	9
Applicant Exhibit Five, Rate Curve	15
Applicant Exhibit Six, Tabulation	16
Applicant Exhibit Seven, Rate/Cum Curve	19

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. NUTTER: Call next Case Number 6962.

MR. PADILLA: Application of BTA Oil Producers for special pool rules and pool extension, Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have two witnesses.

(Witnesses sworn.)

STEVE PAYTON

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you please state your name, by whom you're employed, and in what capacity?

A My name is Steve Payton. I'm employed by BTA Oil Producers of Midland. I've worked with BTA a year and a half and I've testified before the New Mexico Oil Conservation Commission before.

Q Mr. Payton, you're a geologist, are you not?

A Yes, I'm a geologist.

Q And you've testified previously before

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 433-7409

1 the Division in that capacity?

2 A Yes.

3 Q And as a geologist have you made a study
4 of and prepared certain exhibits for this application?

5 A Yes.

6 MR. KELLAMIN: We tender Mr. Payton as an
7 expert geologist.

8 MR. NUTTER: Mr. Payton is qualified.

9 Q Would you please refer to what we've
10 marked as Exhibit Number One and identify that and tell us
11 what the applicant is seeking?

12 A Exhibit Number One is a summary of the
13 application. BTA asks for an extension of the Bell Lake-
14 Devonian North Gas Pool to include Section 6, 7, and 19 of
15 Township 23 South, Range 34 East, Lea County, New Mexico.

16 BTA asks for the promulgation of special
17 pool rules to include 640-acre spacing and well locations
18 within a spacing unit no closer than 1650 feet from the outer
19 boundary lines; no closer than 330 feet from a governmental
20 quarter-quarter section.

21 Q Would you turn to what we've marked as
22 Exhibit Number Two and identify that?

23 A Exhibit Number Two is a structure map on
24 the top of the Devonian; scale 1 inch equals 2000 feet with
25 100-foot contours.

1 BTA's Bell Lake No. 1 is located in Section
2 18, Township 23 South, Range 34 East, Lea County, New Mexico.

3 The field limits are determined by the
4 gas/water contact, which is shown by a blue dashed line at a
5 subsea depth of 11,350.

6 The red solid line running north and south
7 would be discussed later in connection with the cross section.

8 The nearest current producing Devonian
9 gas well is the Continental Bell Lake Unit Well No. 6, located
10 a mile and a half to the north of BTA's well.

11 Q That Continental well in Section 6 is the
12 discovery well for this pool?

13 A Yes.

14 Q And when was it completed, do you remem-
15 ber?

16 A 1961.

17 Q The Bell Lake-Devonian Pool rules have
18 been established since approximately that date?

19 A Yes. I believe it has 160-acre spacing.

20 Q All right. Do you have a recollection as
21 to what the order number is and the date of the order that
22 established the 160-acre spacing for this pool?

23 A The existing rules for the subject pool
24 were established on March 1st, 1962, by the Division Order
25 Number R-2187, and include a provision for 160-acre spacing.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

Santa Fe, New Mexico 87511

Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 455-7409

Q Now when did you complete the BMA well in Section 18?

A June of 1980.

Q What is the status of the Continental well in Section 18 that is south of your well?

A This is the Continental Bell Lake No. 10 and it's currently plugged.

MR. NUTTER: 10 or 9?

MR. KELLAHIN: No. 9, the one in Section 18.

A Oh, okay, in 18. That's a Bone Springs well and it is currently plugged.

Q All right, continuing on down to the south in Section 19, then, what's the status of that Continental well there?

A It's a Devonian gas well which has been plugged.

Q Okay. You propose to have what acreage included in the Bell Lake North Devonian Pool?

A Sections 6, 7, and 19.

MR. NUTTER: What did you say the No. 9 in Section 18 produced from?

A Bone Spring.

MR. NUTTER: Bone Spring.

Q Let's go to Exhibit Number Three, Mr. Pay

1 ton, and have you identify that for me.

2 A Exhibit Number Three is a producing field
3 map. BTA's well, Bell Lake Well No. 1, is indicated by the
4 red dot.

5 The Mid Bell Lake Gas Field is located
6 one mile south of BTA's Bell Lake No. 1. The field made 900-
7 million cubic feet of gas from one well, which is now plugged.

8 The Bell Lake North Gas Devonian Field
9 has produced 23.9 Bcf from one well. It is presently making
10 1.7-million cubic feet of gas per day, plus 780 barrels of
11 water per day.

12 Q Taking Exhibit Three, would you identify,
13 then, for me which of these Devonian pools are spaced on 640
14 acres?

15 A Okay. The Bell Lake South Gas Devonian
16 Field is located 3-1/2 miles to the south of BTA's well. It
17 is an abandoned field. The field made a combined cumulative
18 of 17.8 Bcf from two wells which are now plugged.

19 The Antelope Ridge Gas Devonian Field is
20 located 3-1/2 miles to the southeast and is currently pro-
21 ducing two wells and one well has been plugged in that field.
22 The three wells have made a combined cumulative of 29.1 Bcf
23 as of April, 1980. The two wells presently average 550 Mcf
24 per day, plus 67 barrels of water per day, and both of these
25 fields are on 640-acre spacing.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

Santa Fe, New Mexico 87501

Phone (505) 435-7409

Q All right, let's go back to Exhibit Number Two for a couple questions.

How have you determined what acreage ought to be included within the Bell Lake-Devonian Pool?

A All right. The limits are defined by the gas/water contacts and by the fault to the east and the fault to the south of our well.

Q How did you determine the existence of those faults?

A By seismic.

Q Okay.

A The gas/water contacts were determined by tests performed on the wells both north and south of BTA's well, which I will get into later.

Q Is Section 18 controlled entirely by BTA Oil Producers?

A Yes. We have the entire 640-acre. We have partners in the drilling of that well.

Q That 640-acre section is available for dedication to one well?

A Yes.

Q And what is the ownership situation for the Continental well in Section 6?

A That's in the Bell Lake Unit and I'm sure there are a number of people within that unit.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 Q All right. Show me what indicates the --
2 A Okay.
3 Q -- limits of the Bell Lake Unit --
4 A Yes.
5 Q -- operated by Continental.
6 A There are nine sections within the unit,
7 shown by the dashed dark line. This is north of BTA's well,
8 in Section 18.
9 Q All right, sir, let's go to your Exhibit,
10 the cross section. That's Exhibit Number Four.
11 A Exhibit Number Four is a cross section
12 showing the three wells in the area, shown by -- shown by
13 the red line in the structure map, running from north to
14 south, and the cross section runs from west to east. The line
15 of section between the wells is shown by from A to A'. The
16 top of the Devonian is correlated across Section, and the
17 gas/water contact is shown as a black horizontal line at
18 -11,350 to the north and shown in red at -11,265 to the south.
19 A fault is shown separating the well to the south. That
20 would be the Continental Bell Lake No. 10.
21 The gas/water contact in the Bell Lake
22 North Field is determined by test results on the Continental
23 Bell Lake Well No. 6 in Section 6.
24 The Devonian was perforated in this well
25 at separate intervals from 14,568, 14,829, as shown in green

1 on the cross section.

2 The lowermost water-free drill stem test
3 was made at an interval of 14,747 to 14,835, recovering gas
4 to surface at a rate of 5.7-million cubic feet of gas per
5 day, plus two barrels of mud, and three barrels of distillate.

6 This well was completed in 1959 with a
7 calculated open flow of 30.5-Million cubic feet of gas per
8 day, plus 36 barrels of distillate.

9 In 1971 a through tubing bridge plug was
10 set at 14,750. A separate gas/water contact in the Mid Bell
11 Lake Field to the south is determined by test results on the
12 Continental Bell Lake Well NO. 10 in Section 19.

13 Two drill stem tests were run with both
14 recovering water. The Lowermost drill stem test from 14,820
15 to 14,890 recovered 890 feet of gas-cut mud, plus 2540 feet
16 of gas-cut sulphur water.

17 The second drill stem test from 14,728
18 to 14,890 recovered 211 Mcf per day, plus 2220 feet of highly
19 gas-cut sulphur water.

20 The Devonian was perforated from 14,747
21 to 14,811 and acidized with 15,000 gallons. This well was
22 completed flowing 3.2-million cubic feet of gas per day, plus
23 160 barrels of water per day, in March, 1965. It was plugged
24 in December, 1974.

25 The BTA Bell Lake Well No. 1 in the center

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7401

1 of the cross section was drilled to total depth of 14,727.
2 The lowermost drill stem test covered the entire Devonian
3 formation and was -- that was penetrated, and recovered gas
4 at 169 Mcf per day, plus 3000 feet of water blanket, and 926
5 feet of drilling fluid.

6 The Devonian was perforated from 14,660
7 to 14,708, and acidized with 10,000 gallons -- or 300 gallons.
8 It flowed Mcf per day. An additional acid treatment was made
9 with 10,000 gallons and the well was completed flowing 4.8-
10 million cubic feet a day, plus 85 barrels of load water in
11 1980, May of 1980.

12 The well is currently being worked on.
13 The tubing is currently being worked on but last production
14 was 4.8-million cubic feet a day, plus 12 barrels of conden-
15 sate per day and 2 barrels of water per day.

16 Q Based upon your study of the geology,
17 Mr. Payton, do you have an opinion as to whether or not one
18 well can adequately and effectively develop a 640-acre spacing
19 unit?

20 A Yes, I believe so.

21 Q Were Exhibits One through Four prepared
22 by you or compiled under your direction and supervision?

23 A Yes, they were compiled by myself and
24 Steve Salmon.

25 Q In your opinion, Mr. Payton, will approval

SALLY W. BOYD, C.S.R.

Rt. 1 Box 199-B
Sumner Co., New Mexico 87501
Phone (505) 455-7409

1 of this application be in the best interests of conservation,
2 prevention of waste, and the protection of correlative rights?

3 A Yes, it will.

4 Q In your opinion will approval of this
5 application avoid the drilling of unnecessary wells?

6 A Yes.

7 MR. KELLAHIN: That concludes our examin-
8 ation of Mr. Payton.

9
10 CROSS EXAMINATION

11 BY MR. NUTTER:

12 Q Mr. Payton, it would appear from the cross
13 section, Exhibit Number Four, that your well is perforated
14 in the uppermost portion of the Devonian only and that pro-
15 ducing interval would be the equivalent of the top two sec-
16 tions in the Bell Lake No. 6, is that it?

17 A Yes.

18 Q And your well wasn't drilled any deeper
19 in the Devonian then, was it?

20 A That's right.

21 Q And you perforated almost down to your
22 TD, then.

23 A Yes. One foot above the TD, I believe.

24 Q Why wasn't the well drilled any further
25 into the Devonian?

SALLY W. SOYD, C.B.R.

Rt. 1, Box 192-B

Santa Fe, New Mexico 87101

Phone (505) 455-7409

SALLY W. BOYD, C.S.R.
 Rt. 1 Box 193-B
 Santa Fe, New Mexico 87501
 Phone (505) 435-7409

1 A We were concerned about the gas/water
 2 contact. We wanted to stay as high above it as we could be-
 3 cause the offset wells had been producing for a number of
 4 years and that was the main reason, just for staying out of
 5 the water.

6 Q Well, it would appear that one of the
 7 better zones, according to DST's in the Bell Lake No. 6, was
 8 this interval down at about a -11,300, and you missed that
 9 by 300 or 400 feet.

10 A That's right.

11 Q Do you have reason to believe the gas/
 12 water contact has moved in this structure?

13 A Yes, we believe it has. The original gas/
 14 water contact was at -11,350. We took that from the bottom
 15 perfs, and since then a bridge plug has been set above that
 16 point and it's hard to define an exact gas/water contact in
 17 that well, but it has moved up since original completion.

18 Q Well, now, was the purpose of this work-
 19 over in 1971, where they put the tubing bridge plug in at
 20 14,750, was the purpose of that to come up above the water,
 21 Gas/water contact?

22 A I would assume so.

23 Q Had this well started making considerable
 24 water?

25 A I don't have the production. Steve Salmer

1 will present that, but yes, it had been making water.

2 Q And it originally hadn't.

3 A It was completed water-free and it did
4 start making water, yes.

5 Q And so to stay away from that water you
6 just drilled into the top of the Devonian and stopped.

7 Yes.

8 Q Now this other well over here on the
9 cross section, I guess is immaterial because it's on the other
10 side of the fault, anyway, but apparently it was just com-
11 pleted in the uppermost portion of the Devonian, also.

12 A That's correct.

13 Q And it was abandoned with a very low cum-
14 ulative recovery.

15 A That's right.

16 Q Less than a billion.

17 MR. NUTTER: Are there any further ques-
18 tions of the witness? He may be excused.

19
20 STEVE SALMON

21 being called as a witness and having been duly sworn upon his
22 oath, testified as follows, to-wit:

23
24 DIRECT EXAMINATION

25 BY MR. KELLAHIN:

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 Q Mr. Salmon, would you please state your
2 name, by whom you're employed, and in what capacity?

3 A My name is Steve Salmon. I'm employed,
4 and have been employed, by BTA Oil Producers as a petroleum
5 engineer for the last nine years.

6 Q Have you previously testified before the
7 Division as a petroleum engineer?

8 A Yes, I have.

9 Q And pursuant to your employment by BTA
10 as a petroleum engineer have you made a study of and prepared
11 certain exhibits of this application?

12 A Yes, I have.

13 MR. KELLAHIN: We tender Mr. Salmon as an
14 expert petroleum engineer.

15 MR. NUTTER: Mr. Salmon is qualified.

16 Q Mr. Salmon would you turn to what we've
17 marked as Applicant Exhibit Number Five and identify that
18 exhibit for us?

19 A Yes. Exhibit Number Five is a rate/time
20 producing curve for the Continental Bell Lake Unit 2 Well No.
21 6. The gas and water rate scale is on the lefthand side of
22 the page. This is a log scale on the lefthand side. The
23 time scale going from 1961 through 1980 is on the bottom of
24 the page. The solid curve is -- represents the gas production
25 The dashed curve represents water production.

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7439

1 You'll notice the water production only
2 goes back through 1974. The well was producing water prior
3 to this but this data was compiled from the New Mexico Oil
4 and Gas Engineering Committee Annual Report, and prior to
5 1974 water production was not carried in the annual report on
6 gas wells.

7 The Continental well started producing,
8 as shown by the graph, in 1961, and in March of 1980 was still
9 producing 53,385 Mcf per month, which would be 1.7-million
10 cubic feet, or MMCF, per day.

11 It was also producing in March 24,180
12 barrels of water, or on a daily basis this would be 780 bar-
13 rels per day.

14 Exhibit Six, I'd like to go ahead and
15 mention at this time, is a tabular backup to the graph, Ex-
16 hibit Five. And the cumulative production is shown on the
17 last page of this exhibit, Exhibit Six.

18 Q Mr. Salmon, what's the drive mechanism
19 in this reservoir?

20 A This reservoir appears to be essentially
21 a waterdrive. As our geological witness testified, it was
22 initially completed water-free, with the gas/water contact
23 at -11,350 feet.

24 After this time it started making water
25 and did have the through tubing bridge plug set, as shown

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B

Santa Fe, New Mexico 87501

Phone (505) 435-7407

1 on our cross section.

2 In discussing the well with the Continental
3 engineer in Hobbs, he didn't have a number for what the well
4 was making prior to the bridge plug set or after, but he did
5 find a memo in their file that showed that after setting the
6 bridge plug they hoped to obtain a water production of 200
7 barrels per day or less, so I assume it was making substan-
8 tially more than this prior to setting the bridge plug.

9 You'll notice on the --

10 MR. NUTTER: What time of 19 -- that was
11 set in 1971?

12 A Yes, it was set in 1971 and, again, he
13 wouldn't -- he couldn't find an exact date in their files,
14 except that it was set, but I assume it would be in September
15 and October when the gas production of the well was down.
16 It looks like it was down part of those months. But looking
17 at the gas production curve, you can see very little effect
18 from the decline rate of the gas production due to setting
19 that bridge plug.

20 MR. NUTTER: It didn't change the gas
21 production at all.

22 A Right. So, personally, just based on
23 the fact it didn't change the gas production, I doubt if it
24 was very effective in shutting off the water. But, like I
25 say, I have no data on what the water production was before

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 and after, so I can't say that conclusively.

2 Q What was the original pressure in the
3 reservoir, Mr. Salmon?

4 A The original reservoir pressure was 6400
5 psi. Continental is not required to report annual shut-in
6 tubing pressure, but again in discussing this well with the
7 Continental engineer, he found a memo in their file where the
8 well was shutin about four years ago, and the memo said that
9 the shutin tubing pressure indicated a bottom hole pressure
10 in the range of 6000 to 6200 psi.

11 Q When was your BTA well drilled?

12 A Well, we completed it in June of 1980.

13 Q And what was the initial pressure on that
14 well?

15 A The initial shutin tubing pressure, based
16 on 181-hour shut-in after just a very small flow period, was
17 4630 psi. This yielded a calculated bottom hole pressure of
18 6072 psi.

19 Q What conclusion do you reach from the
20 pressure information?

21 A Well, we feel that this is an indication
22 of some pressure depletion due to the existing producing well.
23 A strictly depletion drive reservoir of this size would show
24 a substantially greater drop in this than the 300 to 400 psi
25 pressure drop we've seen, though this confirms our -- the

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 production on the well that it's essentially a waterdrive
2 reservoir with possibly some pressure depletion, though the
3 pressure depletion is very minor.

4 Q Have you made any pressure -- I'm sorry,
5 any reservoir estimates for this Continental No. 2 Well --
6 No. 6 Well?

7 A Yes.

8 Q Is that Exhibit Number Seven?

9 A Right. Before we get to that, though, I
10 attempted to extrapolate the rate/time graph that was Exhibit
11 Number Five to obtain a reserve -- a decline curve reserve
12 for this well; however, the curve is curving up, which indi-
13 cates that any extrapolation made from that curve would pro-
14 bably be on the low side, because each year, as it flattened
15 out more, you'd get a higher reserve number for the gas.

16 MR. NUTTER: You've got infinite reserves.

17 A Well, we made another exhibit to take care
18 of this. This is our Exhibit Number Six, to get rid of a --
19 or to get a curve that -- a plot that didn't curve. We
20 plotted a rate/cum curve.

21 Q And that is Exhibit Number Seven?

22 A Yes. Okay, this is Exhibit Seven. Okay,
23 this is Exhibit Seven.

24 As you can see, the points plotted on
25 this curve form a pretty good straight line. These points

SALLY W. BOYD, C.S.R.

Rt. 1 Box 191-B

San Antonio, New Mexico 87501

Phone (505) 455-7409

1 are the year end rates for each year, and we tried to take
2 December of each year, but if December was abnormal, we took
3 what a normal rate for December would have been for each
4 year.

5
6 of 1980.

7
8 Extending this line out to a rate of
9 10-million cubic feet per month, which would figure out to
10 just over 300 Mcf per day, you get -- you would come up with
11 a reserve of 52 Bcf for the well.

12 MR. NUTTER: And what rate of production
13 would that have been at?

14 A At the 52 Bcf it would be 10-million
15 cubic feet per month, or that would be approximately -- that
16 would be 10 MMCF per month, which would figure out to be ap-
17 proximately 330 Mcf per day.

18 MR. NUTTER: Okay.

19 Q Based upon your study, Mr. Salmon, do you
20 have an opinion as to the drainage area for the Continental
21 well?

22 A Yes, I do.

23 A pore volume reserve, based on the
24 structure map, which was presented as Exhibit Two, and the
25 log calculations based on the Continental Bell Lake Unit 2
Well No. 6, indicates a gas in place of 82 Bcf. The 52 Bcf

SALLY W. BOYD, C.S.R.

12, 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7409

1 reserves from the rate/cum extrapolation would yield a 62
2 percent recovery factor for the total field, and this would
3 be a reasonable recovery factor for a waterdrive reservoir.
4 Therefor, we feel like the well is draining essentially the
5 whole reservoir.

6 Q When you speak of the whole reservoir,
7 what area are you talking about?

8 A Okay, if you'll refer to Exhibit Two,
9 we're talking about all of the area bounded by the -11,350
10 foot gas/water contact and the fault, which are essentially
11 Sections 6, 7, and 19 of Township 23 South, Range 34 East,
12 and some minor peripheral area outside of that.

13 MR. NUTTER: Now that's the area you say
14 would have the 82 billion cubic feet of gas in place?

15 A Yes.

16 Now, in total areawise, this would amount
17 to 3272 acres, or it's roughly equivalent to 5.1 sections.

18 Q In your opinion, then, Mr. Salmon, could
19 one well in this particular pool have the potential to drain
20 and develop a 640-acre spacing and proration unit?

21 A Yes, I feel like it very definitely
22 would.

23 Q In your opinion will the changing of the
24 pool rules to provide for 640-acre spacing avoid the drilling
25 of unnecessary wells?

SALLY W. BOYD, C.S.R.

Rt. 1 Box 153-B
Santa Fe, New Mexico 87501
Phone (505) 431-7409

1 A Yes, I think it will.

2 Q In your opinion will the approval of this
3 application be in the best interests of conservation, prevention
4 of waste, and the protection of correlative rights?

5 A Yes, I do.

6 Q Were Exhibits Five, Six, and Seven pre-
7 pared by you or compiled under your direction and supervision?

8 A Yes. They were -- Steve Payton and I
9 together prepared the exhibits for the hearing and we kind
10 of intermixed our work on the various exhibits.

11 MR. KELLAHIN: That concludes our examin-
12 ation. We tender Exhibits One through Seven.

13 MR. NUTTER: Exhibits One through Seven
14 will be admitted in evidence.

15
16 CROSS EXAMINATION

17 BY MR. NUTTER:

18 Q Mr. Salmon, Continental has been sitting
19 there with that well since 1961 and has produced almost 24
20 billion cubic feet out of it. Do you know whether they have
21 any plans at this time to do any additional drilling in Sec-
22 tion 7 now that you've brought your well in in 18?

23 A Well, we approached them requesting a
24 farmout on Section 7. They did, as a matter of interest,
25 Continental did have the acreage on the south half of Section

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-3
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 18 and we do have a farmout from them on the south half of
2 Section 18.

3 In discussing this with them, we requested
4 farmout from them on Section 7. They said that they wouldn't
5 give us a farmout because it was tied up with the drilling
6 unit, and they liked the drilling possibilities on it.

7 Now, we, as far as I know, we never --
8 we have not asked them pointblank, are you going to develop
9 it. I don't know what their gas price is or anything of this
10 nature, and it could be that this could interfere with their
11 drilling it.

12 If it was our lease, we'd recommend
13 drilling, but Continental, I don't know. I can't say for
14 sure.

15 Q What did your No. 1 Well in Section 18
16 cost?

17 A It cost approximately \$2.4 million.
18 Now, our gas price on that well is \$2.25
19 an Mcf.

20 Q And your well currently makes -- or on
21 a test made about 4-1/2 million a day, is that it?

22 A This is correct, yes.

23 Q Do you have a connection for your well
24 yet?

25 A Yes. It is connected to Transwestern

SALLY W. BOYD, C.S.R.

Rt. 1 Box 192-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

1 and prior to developing a tubing leak, was on production for
2 several days.

3 Q And you have it out now making repairs?

4 A Yes. We have pulled the tubing and found
5 some holes in the tubing and now we're going to run the tubing
6 back in.

7 Q How long had it produced?

8 A It went on production -- actually it went
9 on May the 28th, so actually it went on production in May,
10 I guess I should say; went on production May the 28th and
11 produced up until about three to four days ago.

12 Q You had about a month's production?

13 A So it's about a month's production, yes.

14 Q Did it show any characteristics change
15 or anything during that time?

16 A No, it was producing fairly stable during
17 that month. The only thing we did notice was initially we
18 were making some load water. This load water has disappeared
19 and it was apparently at least partially due to the tubing
20 leak, and then water that we had lost while we were completing
21 the well.

22 Q Now this 4-1/2 million a day, is that the
23 amount it will produce into the pipeline?

24 A Yes. In fact, the tubing pressure on
25 that well is substantiall higher than pipeline pressure. The

SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 435-7403

1 pipeline pressure is roughly 900 pounds. The flowing tubing
2 pressure on the latest test we have available, which was just
3 before we shut it in for the work, was 3950 psi, and the
4 tubing pressure while we had been flowing it has increased.
5 It did increase as the water, you know, decreased.

6 Q That's flowing tubing pressure.

7 A That's flowing tubing pressure.

8 MR. NUTTER: Are there any further ques-
9 tions of Mr. Salmon? He may be excused.

10 Do you have anything further, Mr. Kellahin?

11 MR. KELLAHIN: No, sir.

12 MR. NUTTER: Does anyone have anything
13 they wish to offer in Case Number 6962?

14 We'll take the case under advisement.

15
16 (Hearing concluded.)
17
18
19
20
21
22
23
24
25

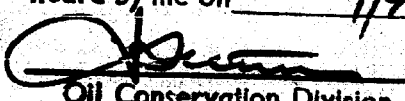
SALLY W. BOYD, C.S.R.

Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

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, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 682
heard by me on 7/9 1960.
, Examiner
Oil Conservation Division

- CASE 6958:** Application of Kenai Oil and Gas, Inc. for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Seven Rivers and Artesia Queen-Crayburg-San Andres production in the wellbore of its Gulf State Well No. 1 located in Unit K of Section 36, and its Cobb Federal Well No. 2 located in Unit H of Section 22, both in Township 18 South, Range 27 East, Artesia Pool. Applicant further seeks an administrative procedure whereby similar commingling could be approved for other wells to be drilled in the NE/4 and S/2 NW/4 of said Section 22.
- CASE 6959:** Application of Great Western Drilling 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 S/2 of Section 19, Township 18 South, Range 27 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 6960:** Application of Bass Enterprises Production Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to and including the Strawn formation underlying the S/2 SE/4 of Section 13, Township 16 South, Range 36 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 6950:** (Continued from June 25, 1980, Examiner Hearing)
Application of Bass Enterprises Production Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the North line and 1980 feet from the East line of Section 4, Township 25 South, Range 31 East, the E/2 of said Section 4 to be dedicated to the well.
- CASE 6961:** Application of Conoco Inc. for a dual completion and unorthodox well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Meyer A-29 Well No. 11 to be drilled at an unorthodox location 990 feet from the North line and 660 feet from the East line of Section 29, Township 22 South, Range 36 East, to produce gas from the Langley-Devonian and -Ellenburger Pools thru parallel strings of tubing, the E/2 of said Section 29 to be dedicated to the well.
- CASE 6962:** Application of BTA Oil Producers for special pool rules and pool extension, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of Special Pool Rules for the North Bell Lake-Devonian Gas Pool to provide for 640-acre spacing and specified well locations. Applicant also seeks the extension of said pool to include all of Sections 6, 7, and 18, Township 23 South, Range 34 East.
- CASE 6896:** (Continued from June 25, 1980, Examiner Hearing)
Application of John E. Schalk for a non-standard gas proration unit and an unorthodox gas well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard Blanco Mesaverde gas proration unit comprising the NE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to his Gulf Well No. 2 to be drilled at an unorthodox location 1925 feet from the North line and 790 feet from the East line of said Section 8.
- CASE 6965:** Application of Supron Energy Corporation for a non-standard gas proration unit, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard Mesaverde and Dakota gas proration unit comprising the SE/4 of Section 8, Township 25 North, Range 3 West, to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6966:** Application of Reading & Bates Petroleum Co. for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Gallup and Dakota formations underlying the NE/4 of Section 17, Township 24 North, Range 3 West, Chacon Field, 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 6942:** (Continued from June 25, 1980, Examiner Hearing)
Application of Benson-Montin-Greer Drilling Corporation for amendment of Order No. R-2565-B, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Rule 2 of the Special Pool Rules for the West Puerto Chiquito-Mancos Oil Pool as promulgated by Order No. R-2565-B to provide that all 320-acre spacing and proration units in said pool would comprise either the W/2 or the E/2 of a governmental section, provided however, that one injection well would have dedicated thereto the N/2 of Section 1, Township 24 North, Range 1 West, and also that the short 400-acre sections on the South side of Township 27 North, Range 1 West, would each comprise a single spacing unit.

EXHIBIT NO. 1
CASE 6962
SUMMARY OF APPLICATION
BELL LAKE NORTH (DEVONIAN)

1. Extension of the Bell Lake Devonian, North (Gas) Pool to include sections 6, 7, and 18 of T-23-S, R-34-E, Lea County, New Mexico.
2. The promulgation of special pool rules to include 640 acre spacing and well locations within a spacing unit no closer than 1,650 feet from the outer boundary lines, nor closer than 330 feet from a governmental quarter-quarter section.

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION

BTA EXHIBIT NO. 1
CASE NO. 6962

EXHIBIT NO. _____
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCPPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1961	Jan.			
	Feb.			
	Mar.			
	Apr.			
	May			
	June			
	July			
	Aug.	6,067		
	Sep.	50,262	128	
	Oct.	46,674	143	
	Nov.	67,489	182	
	Dec.	80,180	102	
1961 TOTALS		250,672	555	
1962	Jan.	112,482	176	
	Feb.	91,587	292	
	Mar.	138,036	361	
	Apr.	48,716	140	
	May	34,288	97	
	June	19,320	81	
	July	39,874	73	
	Aug.	-	62	
	Sep.	-	-	
	Oct.	-	-	
	Nov.	27,709	47	
	Dec.	127,610	402	
1962 TOTALS		639,622	1,731	
1963	Jan.	1,497	20	
	Feb.	-	-	
	Mar.	-	-	
	Apr.	-	-	
	May	-	-	
	June	1,026	-	
	July	51,164	40	
	Aug.	40,114	7	
	Sep.	9,333	-	
	Oct.	54,674	36	
	Nov.	42,425	3	
	Dec.	59,652	15	
1963 TOTALS		259,885	121	
1964	Jan.	78,058		
	Feb.	84,047	56	
	Mar.	74,629	186	
	Apr.	141,389	371	
	May	111,635	195	
	June	211,312	620	
	July	97,007	239	
	Aug.	155,676	435	
	Sep.	134,604	351	
	Oct.	139,099	371	
	Nov.	46,237	117	
	Dec.	23,583	52	
1964 TOTALS		1,297,276	2,993	

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
BTA EXHIBIT NO. 6
CASE NO. 6962

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1965	Jan.	73,101	195	
	Feb.	62,771	133	
	Mar.	103,421	263	
	Apr.	54,230	106	
	May	102,134	260	
	June	91,647	225	
	July	16,643	40	
	Aug.	75,484	161	
	Sep.	101,493	76	
	Oct.	77,437	240	
	Nov.	164,484	432	
	Dec.	223,945	287	
1965 TOTALS		1,146,460	2,451	
1966	Jan.	265,697	488	
	Feb.	206,814	565	
	Mar.	216,727	586	
	Apr.	204,212	360	
	May	210,630	333	
	June	178,757	508	
	July	153,277	219	
	Aug.	197,115	569	
	Sep.	228,956	643	
	Oct.	227,302	558	
	Nov.	280,417	537	
	Dec.	294,074	784	
1966 TOTALS		2,663,978	6,150	
1967	Jan.	272,747	697	
	Feb.	256,392	724	
	Mar.	277,458	720	
	Apr.	225,412	577	
	May	146,865	403	
	June	102,932	274	
	July	165,134	380	
	Aug.	227,977	562	
	Sep.	245,484	656	
	Oct.	244,345	617	
	Nov.	230,484	570	
	Dec.	231,053	537	
1967 TOTALS		2,626,283	6,717	
1968	Jan.	240,052	612	
	Feb.	238,664	468	
	Mar.	252,634	617	
	Apr.	181,875	446	
	May	201,534	379	
	June	185,077	323	
	July	201,489	505	
	Aug.	191,710	464	
	Sep.	193,939	410	
	Oct.	213,493	451	
	Nov.	202,769	464	
	Dec.	193,508	412	
1968 TOTALS		2,496,744	5,551	

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFM</u>	<u>BCPM</u>	<u>BWPM*</u>
1969	Jan.	193,804	419	
	Feb.	159,918	367	
	Mar.	162,145	480	
	Apr.	159,057	-	
	May	167,474	625	
	June	52,315	353	
	July	167,738	404	
	Aug.	157,313	340	
	Sep.	168,343	382	
	Oct.	168,044	383	
	Nov.	159,779	262	
	Dec.	164,243	7	
	1969 TOTALS	1,880,173	4,022	
1970	Jan.	162,637	308	
	Feb.	153,587	446	
	Mar.	165,748	-	
	Apr.	149,643	131	
	May	147,165	291	
	June	148,672	219	
	July	99,683	176	
	Aug.	63,197	91	
	Sep.	154,181	262	
	Oct.	154,957	311	
	Nov.	134,253	117	
	Dec.	152,210	200	
	1970 TOTALS	1,685,933	2,552	
1971	Jan.	148,733	284	
	Feb.	129,235	250	
	Mar.	139,257	300	
	Apr.	130,240	288	
	May	136,167	256	
	June	120,110	214	
	July	180,308	258	
	Aug.	139,014	263	
	Sep.	32,353	13	
	Oct.	68,628	301	
	Nov.	147,914	323	
	Dec.	128,214	275	
	1971 TOTALS	1,500,173	3,025	
1972	Jan.	121,544	289	
	Feb.	112,834	201	
	Mar.	134,174	266	
	Apr.	122,740	256	
	May	120,605	248	
	June	109,762	110	
	July	89,300	175	
	Aug.	94,126	220	
	Sep.	84,902	136	
	Oct.	94,725	145	
	Nov.	84,900	33	
	Dec.	107,569	233	
	1972 TOTALS	1,277,181	2,312	

workover

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1973	Jan.	88,701	121	
	Feb.	55,665	57	
	Mar.	113,335	233	
	Apr.	114,951	155	
	May	113,655	-	
	June	105,102	99	
	July	111,292	211	
	Aug.	108,803	219	
	Sep.	93,788	180	
	Oct.	112,295	235	
	Nov.	94,267	234	
	Dec.	106,158	137	
1973 TOTALS		1,218,042	1,907	
1974	Jan.	74,939	121	12,604
	Feb.	87,603	181	18,854
	Mar.	96,885	201	20,938
	Apr.	89,169	173	18,021
	May	89,636	194	20,208
	June	77,625	16	1,667
	July	89,229	157	16,354
	Aug.	82,030	77	8,021
	Sep.	87,661	-	-
	Oct.	84,130	-	-
	Nov.	57,775	258	26,875
	Dec.	71,364	139	14,479
1974 TOTALS		988,046	1,517	158,021
1975	Jan.	74,264	12	1,250
	Feb.	82,856	173	18,021
	Mar.	93,509	166	17,292
	Apr.	81,935	164	17,083
	May	82,402	167	17,336
	June	79,512	173	18,021
	July	79,339	190	19,792
	Aug.	74,638	149	15,521
	Sep.	64,595	146	15,208
	Oct.	68,103	147	15,313
	Nov.	69,289	132	13,750
	Dec.	71,483	145	15,104
1975 TOTALS		921,925	1,764	183,751
1976	Jan.	69,984	140	14,583
	Feb.	61,866	130	13,542
	Mar.	59,822	93	9,688
	Apr.	65,140	131	13,646
	May	50,470	74	7,708
	June	59,171	212	22,083
	July	52,806	8	833
	Aug.	65,004	101	10,521
	Sep.	78,742	148	15,417
	Oct.	74,610	93	9,687
	Nov.	64,128	134	13,958
	Dec.	66,209	159	16,563
1976 TOTALS		767,952	1,423	148,229

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCPPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1977	Jan.	65,447	89	9,271
	Feb.	65,985	130	14,768
	Mar.	72,573	121	13,746
	Apr.	60,665	89	10,110
	May	74,785	152	17,153
	June	67,494	133	15,109
	July	71,403	158	17,949
	Aug.	67,003	128	14,541
	Sep.	70,052	132	14,995
	Oct.	69,720	-	-
	Nov.	63,790	28	3,181
	Dec.	58,804	162	18,403
1977 TOTALS		807,721	1,322	149,226
1978	Jan.	56,408	121	13,746
	Feb.	56,411	126	14,314
	Mar.	62,324	172	19,539
	Apr.	61,342	112	12,723
	May	60,892	127	14,427
	June	59,841	140	15,904
	July	62,319	124	14,086
	Aug.	61,098	157	17,835
	Sep.	61,701	138	15,677
	Oct.	59,134	135	15,336
	Nov.	56,464	134	15,222
	Dec.	51,730	118	13,405
1978 TOTALS		709,664	1,604	182,214
1979	Jan.	54,271	100	11,360
	Feb.	57,022	105	11,928
	Mar.	58,487	135	15,336
	Apr.	26,007	119	13,518
	May	61,415	141	16,018
	June	56,508	119	13,518
	July	48,329	112	-
	Aug.	48,292	-	-
	Sep.	56,828	36	-
	Oct.	55,802	-	-
	Nov.	49,487	110	21,060
	Dec.	57,275	131	24,180
1979 TOTALS		629,723	1,110	126,918
1980	Jan.	55,774	140	24,180
	Feb.	49,204	-	-
	Mar.	53,385	66	24,180
1980 TOTALS		158,363	206	48,360
CUMULATIVE		23,920,448	49,033	996,719

*BWPM figure unavailable before January, 1974.

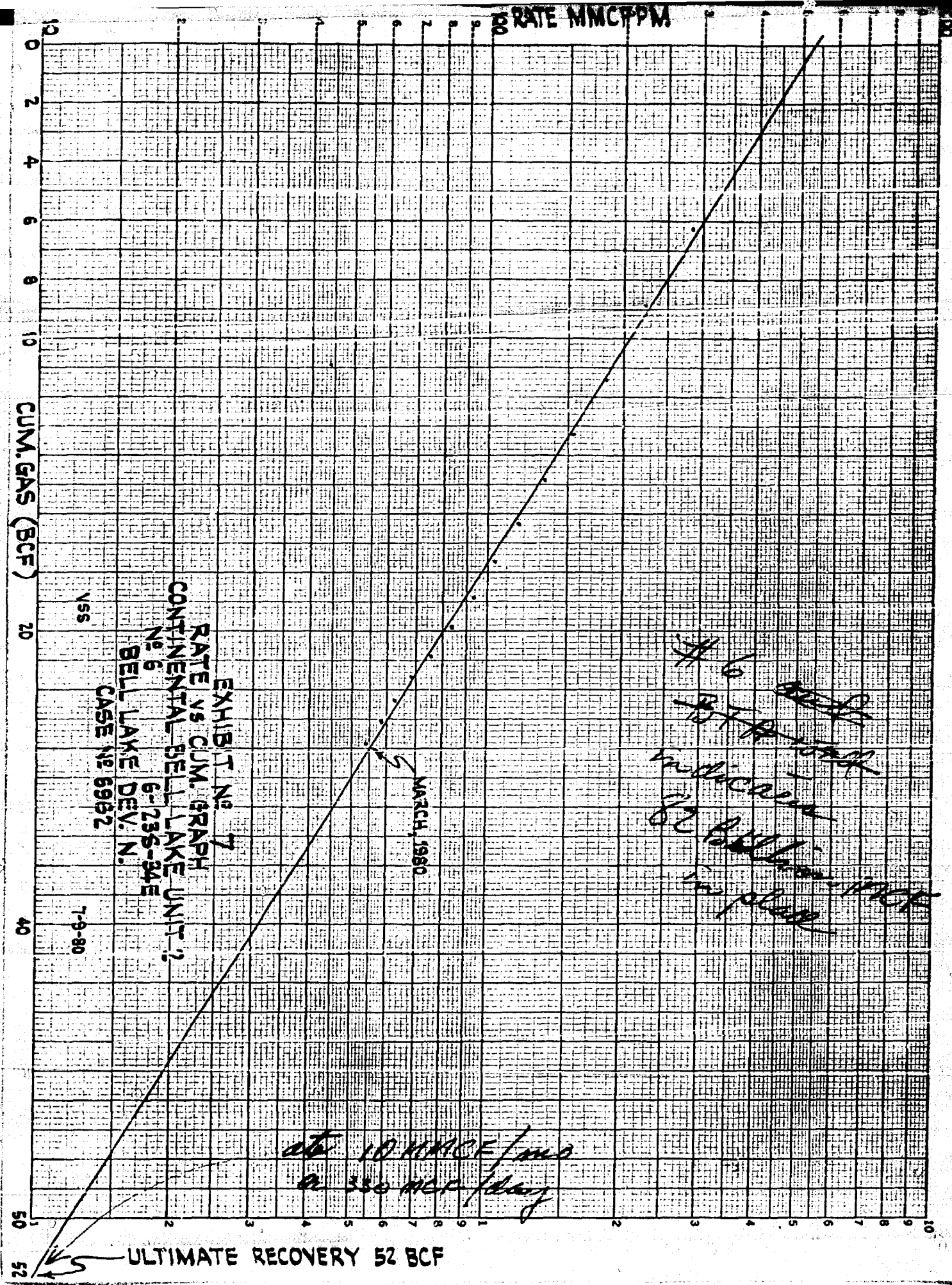


EXHIBIT NO. 1
CASE 6962
SUMMARY OF APPLICATION
BELL LAKE NORTH (DEVONIAN)

1. Extension of the Bell Lake Devonian, North (Gas) Pool to include sections 6, 7, and 18 of T-23-S, R-34-E, Lea County, New Mexico.
2. The promulgation of spcial pool rules to include 640 acre spacing and well locations within a spacing unit no closer than 1,650 feet from the outer boundary lines, nor closer than 330 feet from a governmental quarter-quarter section.

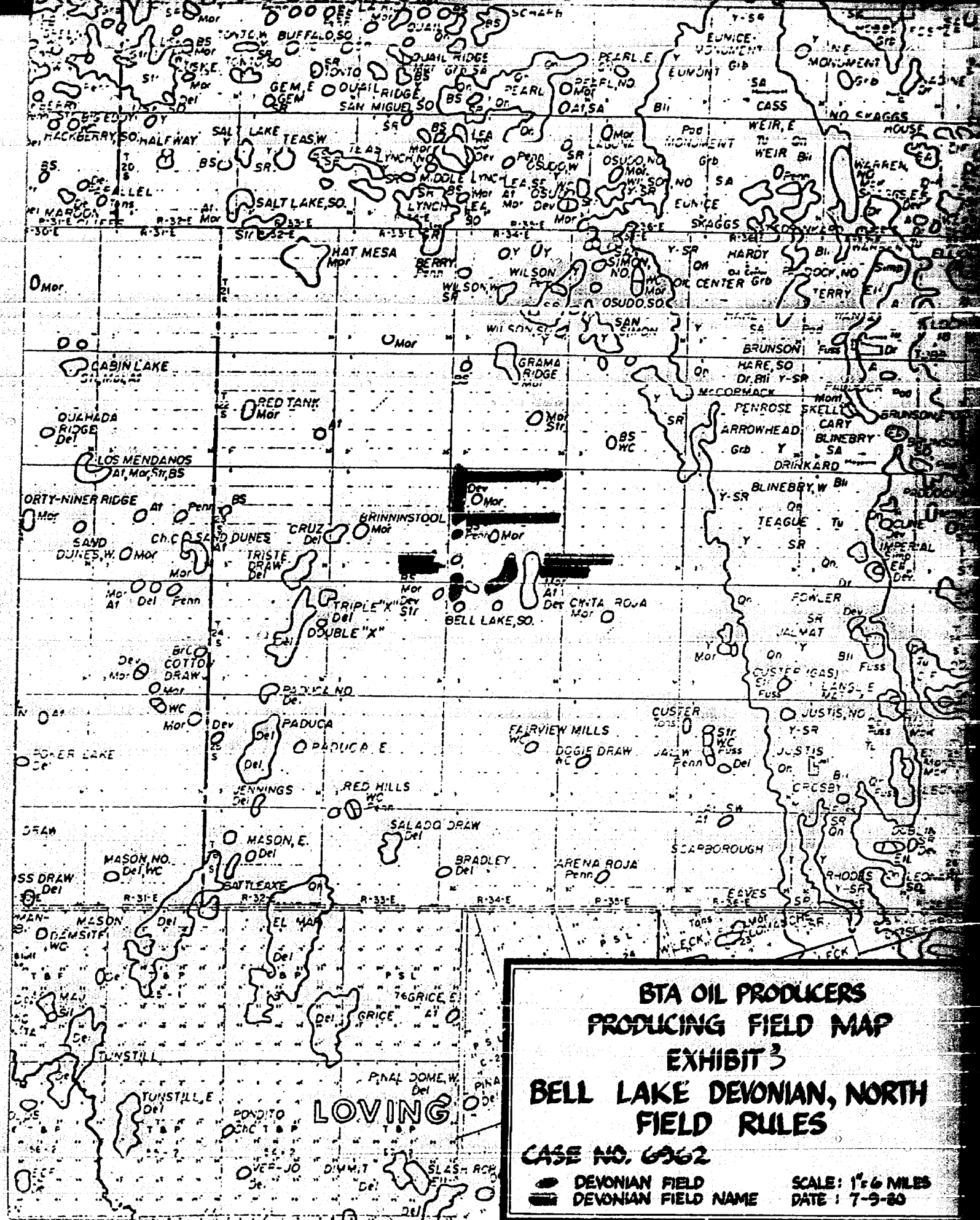


EXHIBIT NO. _____
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1961	Jan.			
	Feb.			
	Mar.			
	Apr.			
	May			
	June			
	July			
	Aug.	6,067		
	Sep.	50,262	128	
	Oct.	46,674	143	
	Nov.	67,489	182	
	Dec.	80,180	102	
1961 TOTALS		250,672	555	
1962	Jan.	112,482	176	
	Feb.	91,587	292	
	Mar.	138,036	361	
	Apr.	48,716	140	
	May	34,288	97	
	June	19,320	81	
	July	39,874	73	
	Aug.	-	62	
	Sep.	-	-	
	Oct.	-	-	
	Nov.	27,709	47	
	Dec.	127,610	402	
1962 TOTALS		639,622	1,731	
1963	Jan.	1,497	20	
	Feb.	-	-	
	Mar.	-	-	
	Apr.	-	-	
	May	-	-	
	June	1,026	-	
	July	51,164	40	
	Aug.	40,114	7	
	Sep.	9,333	-	
	Oct.	54,674	36	
	Nov.	42,425	3	
	Dec.	59,652	15	
1963 TOTALS		259,885	121	
1964	Jan.	78,058		
	Feb.	84,067	56	
	Mar.	74,629	186	
	Apr.	141,389	371	
	May	111,635	195	
	June	211,312	620	
	July	97,007	239	
	Aug.	155,676	435	
	Sep.	134,604	351	
	Oct.	139,099	371	
	Nov.	46,237	117	
	Dec.	23,583	52	
1964 TOTALS		1,297,276	2,993	

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1965	Jan.	73,101	195	
	Feb.	62,441	166	
	Mar.	103,421	263	
	Apr.	54,230	106	
	May	102,134	260	
	June	91,647	225	
	July	16,643	40	
	Aug.	75,484	161	
	Sep.	101,493	76	
	Oct.	77,437	240	
	Nov.	164,484	432	
	Dec.	223,945	287	
1965 TOTALS		1,146,460	2,451	
1966	Jan.	265,697	488	
	Feb.	206,814	565	
	Mar.	216,727	586	
	Apr.	204,212	360	
	May	210,630	333	
	June	178,757	508	
	July	153,277	219	
	Aug.	197,115	569	
	Sep.	228,956	643	
	Oct.	227,302	558	
	Nov.	280,417	537	
	Dec.	294,074	784	
1966 TOTALS		2,663,978	6,150	
1967	Jan.	272,747	697	
	Feb.	256,392	724	
	Mar.	277,458	720	
	Apr.	225,412	577	
	May	146,865	403	
	June	102,932	274	
	July	165,134	380	
	Aug.	227,977	562	
	Sep.	245,484	656	
	Oct.	244,345	617	
	Nov.	230,484	570	
	Dec.	231,053	537	
1967 TOTALS		2,626,283	6,717	
1968	Jan.	240,052	612	
	Feb.	238,664	468	
	Mar.	252,634	617	
	Apr.	181,875	446	
	May	201,534	379	
	June	185,077	323	
	July	201,489	505	
	Aug.	191,710	464	
	Sep.	193,939	410	
	Oct.	213,493	451	
	Nov.	202,769	464	
	Dec.	193,508	412	
1968 TOTALS		2,496,744	5,551	

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFM</u>	<u>BCPM</u>	<u>BWPM*</u>
1969	Jan.	193,804	419	
	Feb.	153,513	367	
	Mar.	162,145	480	
	Apr.	159,057	-	
	May	167,474	625	
	June	52,315	353	
	July	167,733	404	
	Aug.	157,313	340	
	Sep.	168,343	382	
	Oct.	168,044	383	
	Nov.	159,779	262	
	Dec.	164,243	7	
1969 TOTALS		1,880,173	4,022	
1970	Jan.	162,637	308	
	Feb.	153,587	446	
	Mar.	165,748	-	
	Apr.	149,643	131	
	May	147,165	291	
	June	148,672	219	
	July	99,683	176	
	Aug.	63,197	91	
	Sep.	154,181	262	
	Oct.	154,957	311	
	Nov.	134,253	117	
	Dec.	152,210	200	
1970 TOTALS		1,685,933	2,552	
1971	Jan.	148,733	284	
	Feb.	129,235	250	
	Mar.	139,257	300	
	Apr.	130,240	288	
	May	136,167	256	
	June	120,110	214	
	July	180,308	258	
	Aug.	139,014	263	
	Sep.	32,353	13	
	Oct.	68,628	301	
	Nov.	147,914	323	
	Dec.	128,214	275	
1971 TOTALS		1,500,173	3,025	
1972	Jan.	121,544	289	
	Feb.	112,834	201	
	Mar.	134,174	266	
	Apr.	122,740	256	
	May	120,605	248	
	June	109,762	110	
	July	89,300	175	
	Aug.	94,126	220	
	Sep.	84,902	136	
	Oct.	94,725	145	
	Nov.	84,900	33	
	Dec.	107,569	233	
1972 TOTALS		1,277,181	2,312	

EXHIBIT NO. _____
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCPPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1973	Jan.	88,701	121	
	Feb.	55,665	57	
	Mar.	113,383	239	
	Apr.	114,951	155	
	May	113,655	-	
	June	105,102	99	
	July	111,292	211	
	Aug.	108,803	219	
	Sep.	93,788	180	
	Oct.	112,295	235	
	Nov.	94,267	234	
	Dec.	106,158	137	
1973 TOTALS		1,218,042	1,907	
1974	Jan.	74,939	121	12,604
	Feb.	87,603	181	18,854
	Mar.	96,885	201	20,938
	Apr.	89,169	173	18,021
	May	89,636	194	20,203
	June	77,625	16	1,667
	July	89,229	157	16,354
	Aug.	82,030	77	8,021
	Sep.	87,661	-	-
	Oct.	84,130	-	-
	Nov.	57,775	258	26,875
	Dec.	71,364	139	14,479
1974 TOTALS		988,046	1,517	158,021
1975	Jan.	74,264	12	1,250
	Feb.	82,856	173	18,021
	Mar.	93,509	166	17,292
	Apr.	81,935	164	17,083
	May	82,402	167	17,396
	June	79,512	173	18,021
	July	79,339	190	19,792
	Aug.	74,638	149	15,521
	Sep.	64,595	146	15,208
	Oct.	68,103	147	15,313
	Nov.	69,289	132	13,750
	Dec.	71,483	145	15,104
1975 TOTALS		921,925	1,764	183,751
1976	Jan.	69,984	140	14,583
	Feb.	61,866	130	13,542
	Mar.	59,822	93	9,688
	Apr.	65,140	131	13,646
	May	50,470	74	7,708
	June	59,171	212	22,083
	July	52,806	8	833
	Aug.	65,004	101	10,521
	Sep.	78,742	148	15,417
	Oct.	74,610	93	9,687
	Nov.	64,128	134	13,958
	Dec.	66,209	159	16,563
1976 TOTALS		767,952	1,423	148,229

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCPPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1977	Jan.	65,447	89	9,271
	Feb.	65,985	130	14,768
	Mar.	72,573	121	13,746
	Apr.	60,665	89	10,110
	May	74,785	152	17,153
	June	67,494	133	15,109
	July	71,403	158	17,949
	Aug.	67,003	128	14,541
	Sep.	70,052	132	14,995
	Oct.	69,720	-	-
	Nov.	63,790	28	3,181
	Dec.	58,804	162	18,403
1977 TOTALS		807,721	1,322	149,226
1978	Jan.	56,408	121	13,746
	Feb.	56,411	126	14,314
	Mar.	62,324	172	19,539
	Apr.	61,342	112	12,723
	May	60,892	127	14,427
	June	59,841	140	15,904
	July	62,319	124	14,086
	Aug.	61,098	157	17,835
	Sep.	61,701	138	15,677
	Oct.	59,134	135	15,336
	Nov.	56,464	134	15,223
	Dec.	51,730	118	13,405
1978 TOTALS		709,664	1,604	182,214
1979	Jan.	54,271	100	11,360
	Feb.	57,022	105	11,928
	Mar.	58,487	135	15,336
	Apr.	26,007	119	13,518
	May	61,415	141	16,018
	June	56,508	119	13,518
	July	48,329	112	-
	Aug.	48,292	-	-
	Sep.	56,828	38	-
	Oct.	55,802	-	-
	Nov.	49,487	110	21,060
	Dec.	57,275	131	24,180
1979 TOTALS		629,723	1,110	126,918
1980	Jan.	55,774	140	24,180
	Feb.	49,204	-	-
	Mar.	53,385	66	24,180
1980 TOTALS		158,363	206	48,360
CUMULATIVE		23,920,448	49,033	996,719

*BWPM figure unavailable before January, 1974.

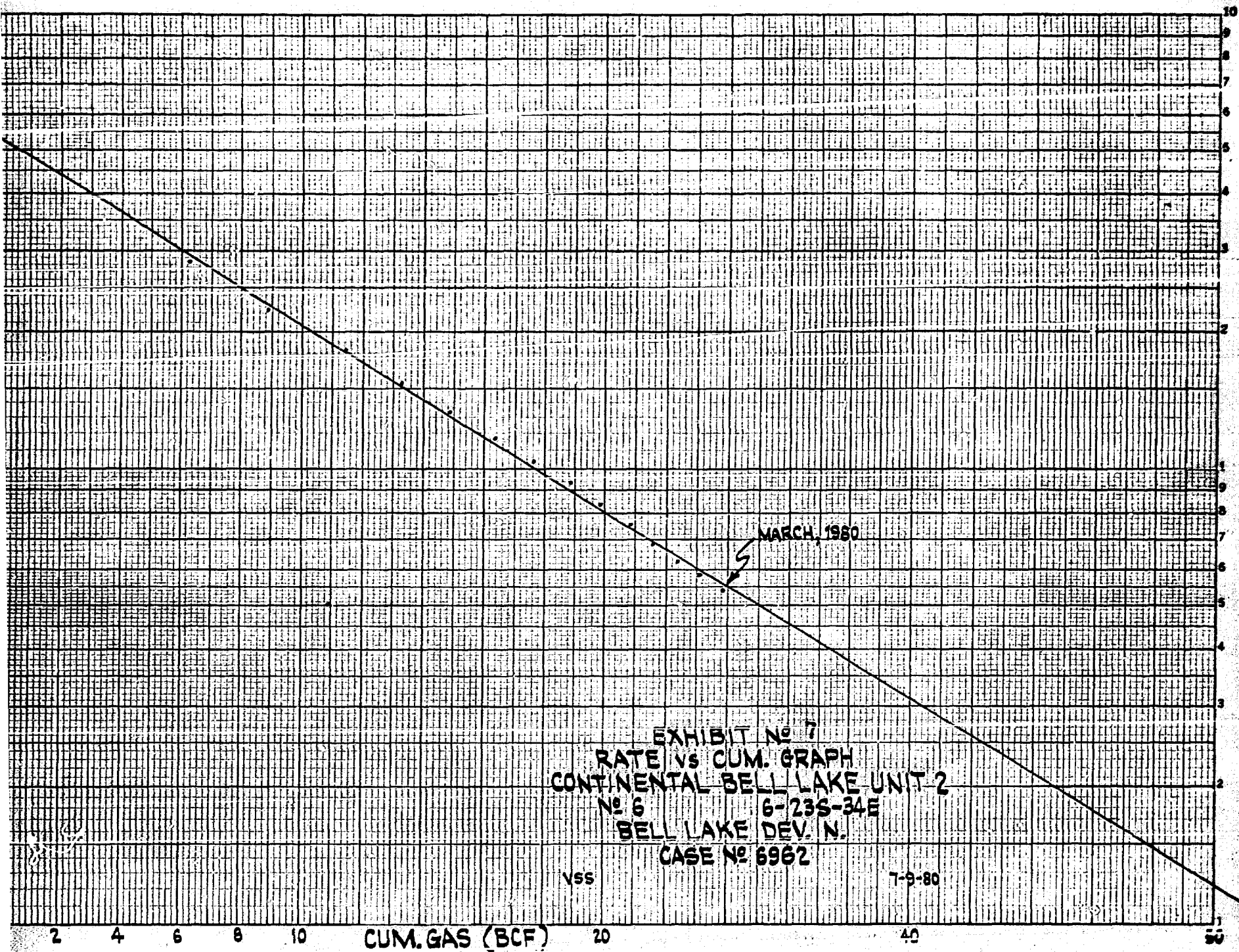
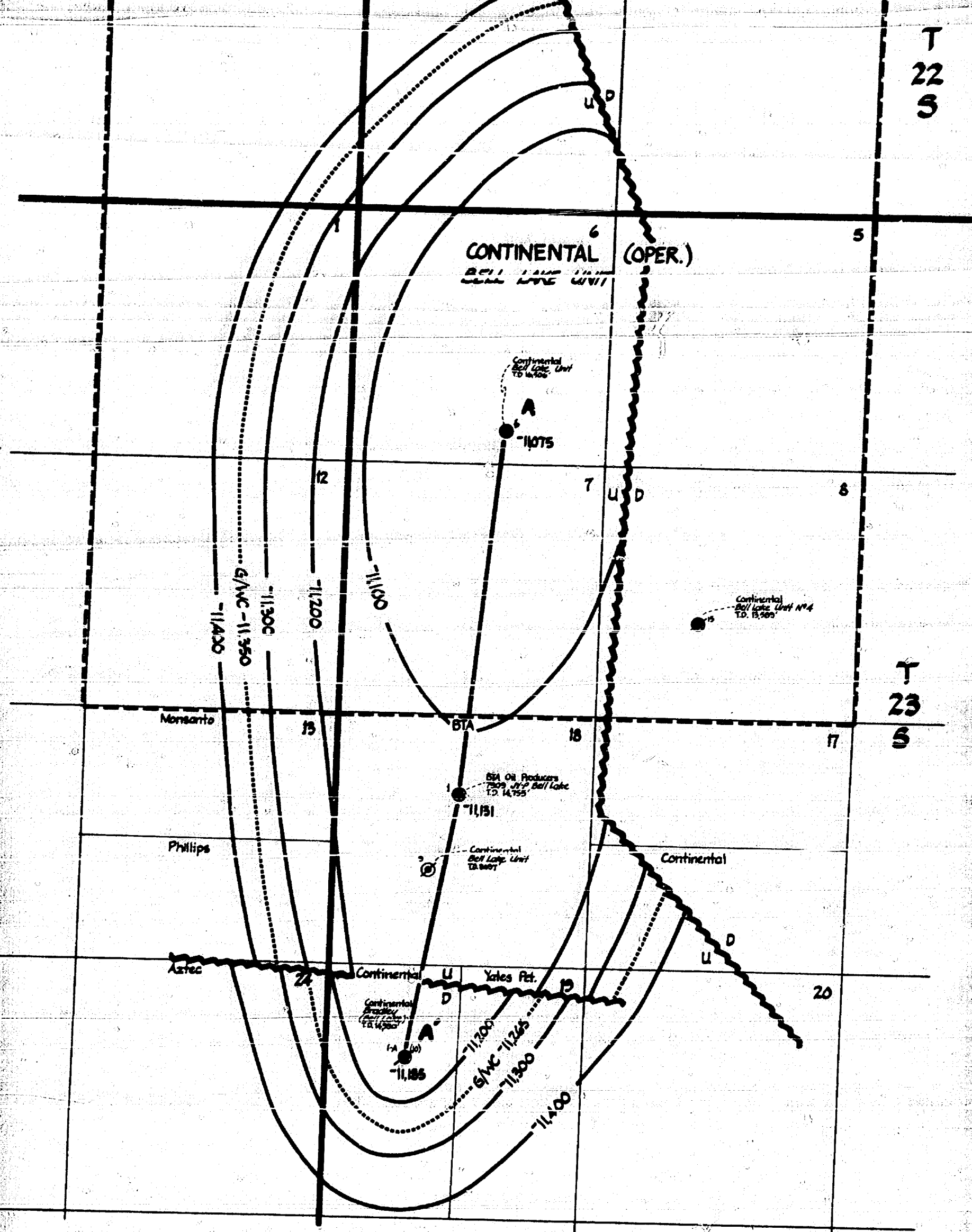


EXHIBIT NO. 1
CASE 6962
SUMMARY OF APPLICATION
BELL LAKE NORTH (DEVONIAN)

1. Extension of the Bell Lake Devonian, North (Gas) Pool to include sections 6, 7, and 18 of T-23-S, R-34-E, Lea County, New Mexico.
2. The promulgation of spcial pool rules to include 640 acre spacing and well locations within a spacing unit no closer than 1,650 feet from the outer boundary lines, nor closer than 330 feet from a governmental quarter-quarter section.

T
22
S

T
23
S



R-33-E

R-34-E

36

31

32

T
22
S

CONTINENTAL
BELL LAKE UNIT (OPER.)

Continental
Bell Lake Unit
T.D. 14,500'

A

-11,075

12

7

U D

8

-11,400

G/WC - 11,350

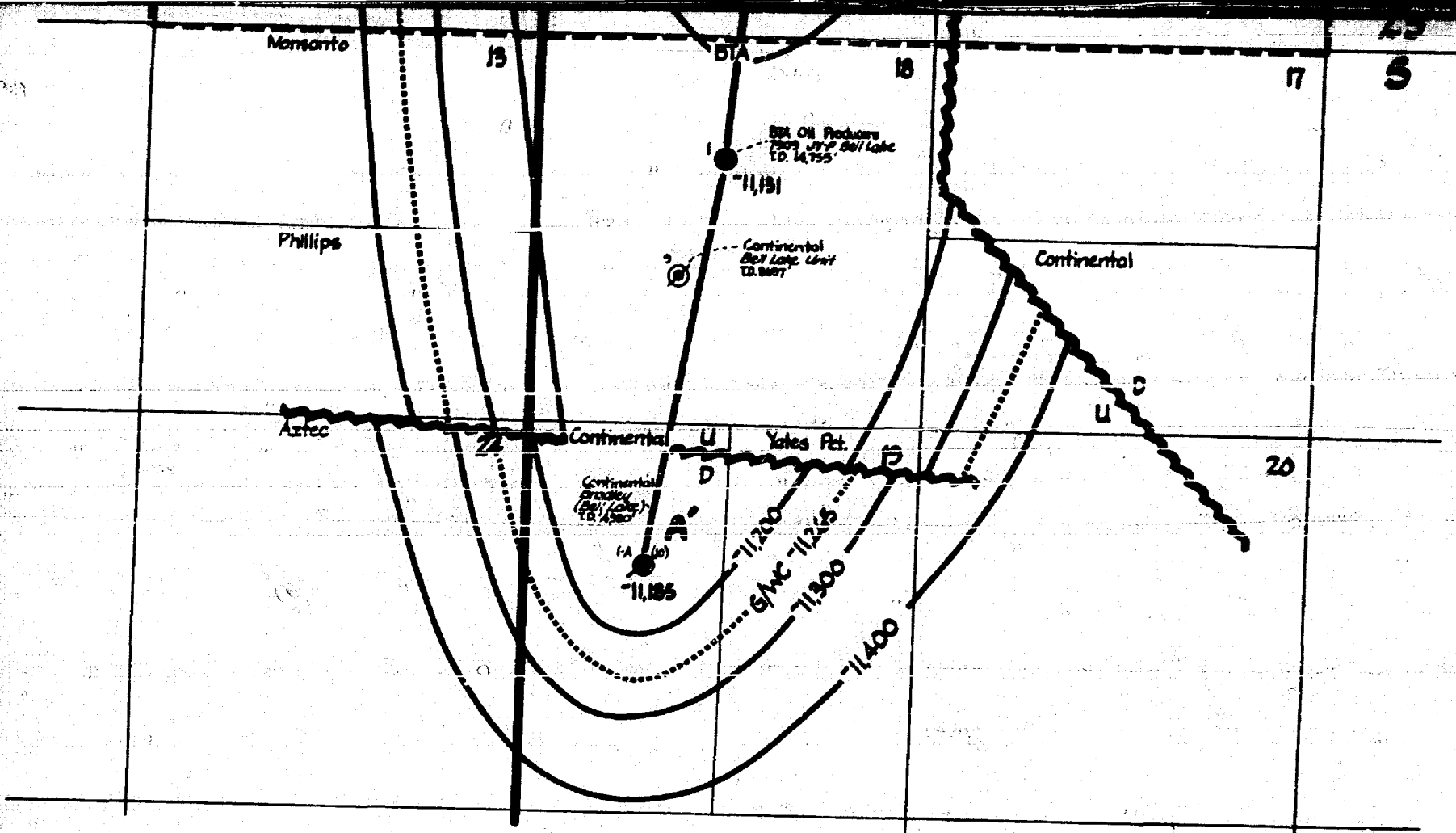
-11,300

-11,200

-11,100

Continental
Bell Lake Unit No. 4
T.D. 13,500'

T
22
S



**BTA OIL PRODUCERS
STRUCTURE MAP
EXHIBIT 2
BELL LAKE DEVONIAN
LEA COUNTY, NEW MEXICO
CASE NO. 6962**

LEGEND

- Producing Devonian Gas Well
- Plugged Devonian Well
- Plugged Morrow Well
- ⊙ Plugged Bone Spring Well

Scale: 1"=2000'
Date: 7-9-80

EXHIBIT NO. _____
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1961	Jan.			
	Feb.			
	Mar.			
	Apr.			
	May			
	June			
	July			
	Aug.	6,067		
	Sep.	50,262	128	
	Oct.	46,674	143	
	Nov.	67,489	182	
	Dec.	80,180	102	
1961 TOTALS		250,672	555	
1962	Jan.	112,482	176	
	Feb.	91,587	292	
	Mar.	138,036	361	
	Apr.	48,716	140	
	May	34,288	97	
	June	19,320	81	
	July	39,874	73	
	Aug.	-	62	
	Sep.	-	-	
	Oct.	-	-	
	Nov.	27,709	47	
	Dec.	127,610	402	
1962 TOTALS		639,622	1,731	
1963	Jan.	1,497	20	
	Feb.	-	-	
	Mar.	-	-	
	Apr.	-	-	
	May	-	-	
	June	1,026	-	
	July	51,164	40	
	Aug.	40,114	7	
	Sep.	9,333	-	
	Oct.	54,674	36	
	Nov.	42,425	3	
	Dec.	59,652	15	
1963 TOTALS		259,885	121	
1964	Jan.	78,058		
	Feb.	84,047	56	
	Mar.	74,629	186	
	Apr.	141,389	371	
	May	111,635	195	
	June	211,312	620	
	July	97,007	239	
	Aug.	155,676	435	
	Sep.	134,604	351	
	Oct.	139,099	371	
	Nov.	46,237	117	
	Dec.	23,583	52	
1964 TOTALS		1,297,276	2,993	

EXHIBIT NO. _____
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1965	Jan.	73,101	195	
	Feb.	62,441	166	
	Mar.	103,421	263	
	Apr.	54,230	106	
	May	102,134	260	
	June	91,647	225	
	July	16,643	40	
	Aug.	75,484	161	
	Sep.	101,493	76	
	Oct.	77,437	240	
	Nov.	164,484	432	
	Dec.	223,945	287	
1965 TOTALS		1,146,460	2,451	
1966	Jan.	265,697	488	
	Feb.	206,814	565	
	Mar.	216,727	586	
	Apr.	204,212	360	
	May	210,630	333	
	June	178,757	508	
	July	153,277	219	
	Aug.	197,115	569	
	Sep.	228,956	643	
	Oct.	227,302	558	
	Nov.	280,417	537	
	Dec.	294,074	784	
1966 TOTALS		2,663,978	6,150	
1967	Jan.	272,747	697	
	Feb.	256,392	724	
	Mar.	277,458	720	
	Apr.	225,412	577	
	May	146,865	403	
	June	102,932	274	
	July	165,134	380	
	Aug.	227,977	562	
	Sep.	245,484	656	
	Oct.	244,345	617	
	Nov.	230,484	570	
	Dec.	231,053	537	
1967 TOTALS		2,626,283	6,717	
1968	Jan.	240,052	612	
	Feb.	238,664	468	
	Mar.	252,634	617	
	Apr.	181,875	446	
	May	201,534	379	
	June	185,077	323	
	July	201,489	505	
	Aug.	191,710	464	
	Sep.	193,939	410	
	Oct.	213,493	451	
	Nov.	202,769	464	
	Dec.	193,508	412	
1968 TOTALS		2,496,744	5,551	

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFPM</u>	<u>BCFPM</u>	<u>BWPM*</u>
1969	Jan.	193,804	419	
	Feb.	159,918	367	
	Mar.	162,145	480	
	Apr.	159,057		
	May	167,474	625	
	June	52,315	353	
	July	167,738	404	
	Aug.	157,313	340	
	Sep.	168,343	382	
	Oct.	168,044	383	
	Nov.	159,779	262	
	Dec.	164,243	7	
1969 TOTALS		1,880,173	4,022	
1970	Jan.	162,637	308	
	Feb.	153,587	446	
	Mar.	165,748	-	
	Apr.	149,643	131	
	May	147,165	291	
	June	148,672	219	
	July	99,683	176	
	Aug.	63,197	91	
	Sep.	154,181	262	
	Oct.	154,957	311	
	Nov.	134,253	117	
	Dec.	152,210	200	
1970 TOTALS		1,685,933	2,552	
1971	Jan.	148,733	284	
	Feb.	129,235	250	
	Mar.	139,257	300	
	Apr.	130,240	288	
	May	136,167	256	
	June	120,110	214	
	July	180,308	258	
	Aug.	139,014	263	
	Sep.	32,353	13	
	Oct.	68,628	301	
	Nov.	147,914	323	
	Dec.	128,214	275	
1971 TOTALS		1,500,173	3,025	
1972	Jan.	121,544	289	
	Feb.	112,834	201	
	Mar.	134,174	266	
	Apr.	122,740	256	
	May	120,605	248	
	June	109,762	110	
	July	89,300	175	
	Aug.	94,126	220	
	Sep.	84,902	136	
	Oct.	94,725	145	
	Nov.	84,900	33	
	Dec.	107,569	233	
1972 TOTALS		1,277,181	2,312	

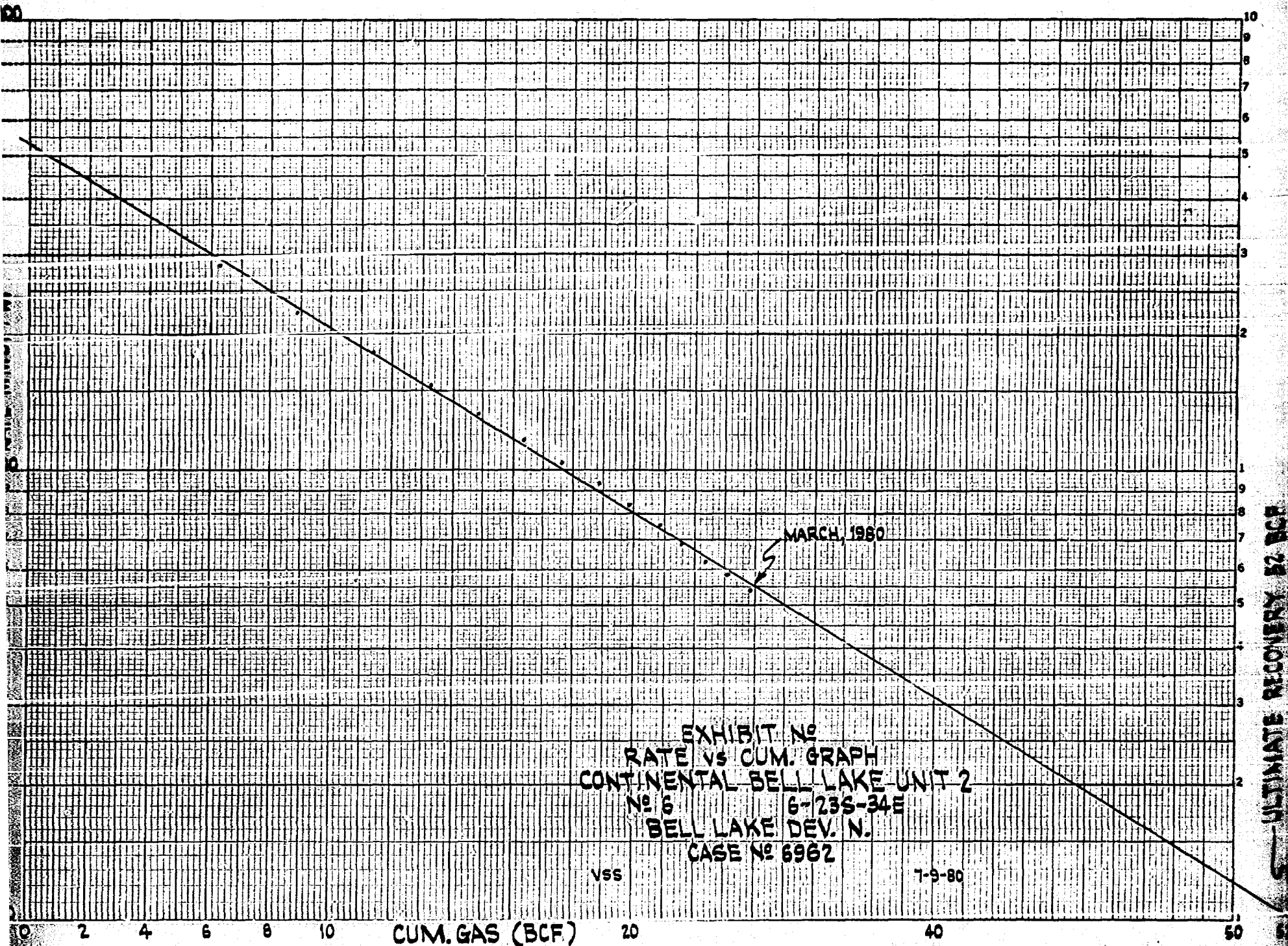
EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

<u>YEAR</u>	<u>MONTH</u>	<u>MCFFPM</u>	<u>BCPM</u>	<u>BWPM*</u>
1973	Jan.	88,701	121	
	Feb.	55,665	57	
	Mar.	113,365	259	
	Apr.	114,951	155	
	May	113,655	-	
	June	105,102	99	
	July	111,292	211	
	Aug.	108,803	219	
	Sep.	93,788	180	
	Oct.	112,295	235	
	Nov.	94,267	234	
	Dec.	106,158	137	
1973 TOTALS		1,218,042	1,907	
1974	Jan.	74,939	121	12,604
	Feb.	87,603	181	18,854
	Mar.	96,885	201	20,938
	Apr.	89,169	173	18,021
	May	89,636	194	20,208
	June	77,625	16	1,667
	July	89,229	157	16,354
	Aug.	82,030	77	8,021
	Sep.	87,661	-	-
	Oct.	84,130	-	-
	Nov.	57,775	258	26,875
	Dec.	71,364	139	14,479
1974 TOTALS		988,046	1,517	158,021
1975	Jan.	74,264	12	1,250
	Feb.	82,856	173	18,021
	Mar.	93,509	166	17,292
	Apr.	81,935	164	17,083
	May	82,402	167	17,396
	June	79,512	173	18,021
	July	79,339	190	19,792
	Aug.	74,638	149	15,521
	Sep.	64,595	146	15,208
	Oct.	68,103	147	15,313
	Nov.	69,289	132	13,750
	Dec.	71,483	145	15,104
1975 TOTALS		921,925	1,764	183,751
1976	Jan.	69,984	140	14,583
	Feb.	61,866	130	13,542
	Mar.	59,822	93	9,688
	Apr.	65,140	131	13,646
	May	50,470	74	7,708
	June	59,171	212	22,083
	July	52,806	8	833
	Aug.	65,004	101	10,521
	Sep.	78,742	148	15,417
	Oct.	74,610	93	9,687
	Nov.	64,128	134	13,958
	Dec.	66,209	159	16,563
1976 TOTALS		767,952	1,423	148,229

EXHIBIT NO.
CASE NO. 6962
PRODUCTION TABULATION
BELL LAKE DEVONIAN, NORTH (GAS)
LEA COUNTY, NEW MEXICO

YEAR	MONTH	MCFCPM	BCPM	BWPM*
1977	Jan.	65,447	89	9,271
	Feb.	65,985	130	14,768
	Mar.	72,373	121	13,746
	Apr.	60,665	89	10,110
	May	74,785	152	17,153
	June	67,494	133	18,109
	July	71,403	158	17,949
	Aug.	67,003	128	14,541
	Sep.	70,052	132	14,995
	Oct.	69,720	-	-
	Nov.	63,790	28	3,181
	Dec.	58,804	162	18,403
	1977 TOTALS	807,721	1,322	149,226
1978	Jan.	56,408	121	13,746
	Feb.	56,411	126	14,314
	Mar.	62,324	172	19,539
	Apr.	61,372	112	12,723
	May	60,892	127	14,427
	June	59,841	140	15,904
	July	62,319	124	14,086
	Aug.	61,098	157	17,835
	Sep.	61,701	138	15,677
	Oct.	59,134	135	15,336
	Nov.	56,464	134	15,222
	Dec.	51,730	118	13,405
	1978 TOTALS	709,664	1,604	182,214
1979	Jan.	54,271	100	11,360
	Feb.	57,022	105	11,928
	Mar.	58,487	135	15,336
	Apr.	26,007	119	13,518
	May	61,415	141	16,018
	June	56,508	119	13,518
	July	48,329	112	-
	Aug.	48,292	-	-
	Sep.	56,828	38	-
	Oct.	55,802	-	-
	Nov.	49,487	110	21,060
	Dec.	57,275	131	24,180
	1979 TOTALS	629,723	1,110	126,918
1980	Jan.	55,774	140	24,180
	Feb.	49,204	-	-
	Mar.	53,385	66	24,180
1980 TOTALS		158,363	206	48,360
CUMULATIVE		23,920,448	49,033	996,719

*BWPM figure unavailable before January, 1974.



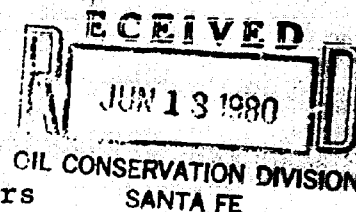
Jason Kellahin
W. Thomas Kellahin
Kathleen Aubrey

KELLAHIN and KELLAHIN
Attorneys at Law
500 Don Gaspar Avenue
Post Office Box 1749
Santa Fe, New Mexico 87501

Telephone 982-4235
Area Code 505

June 13, 1980

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



re: BTA Oil Producers

Case 6962

Dear Joe:

On June 10, 1980 I filed an application for Amendment to the North Bell Lake Morrow Gas Pool Rules. That application was in error. It should have been for the North Bell Lake Devonian Gas Pool.

Please substitute the enclosed Amended Application.

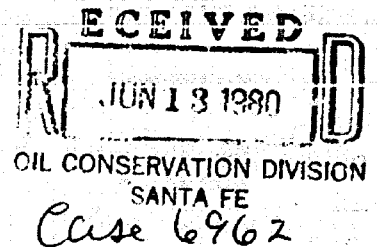
Very truly yours,


W. Thomas Kellahin

cc: Mr. Steve Salmon (BTA)
Mr. Paul Thompson (Conoco)
encl.
WTK:msf

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

IN THE MATTER OF THE APPLICATION OF
BTA OIL PRODUCERS FOR AMENDMENT TO
THE NORTH BELL LAKE DEVONIAN GAS POOL
RULES TO PROVIDE FOR 640-ACRE SPACING
AND FOR EXTENSION OF THE HORIZONTAL
LIMITS OF SAID POOL, LEA COUNTY,
NEW MEXICO



AMENDED APPLICATION

COMES NOW BTA OIL PRODUCERS, by and through its attorneys,
KELLAHIN & KELLAHIN, and applies to the New Mexico Oil Conser-
vation Division for Amendment to the North Bell Lake Devonian
Gas Pool Rules to provide for 640-acre spacing, for well
locations no closer than 1,650 feet from the outer boundaries
of a unit not closer than 330 feet to a governmental quarter-
quarter section, and for extension of said pool to include all
of Section 6, 7, and 18 of T23S, R34E, NMPM, Lea County, New
Mexico, and in support thereof would show:

1. Applicant is the operator of the 7909 JV-P Bell Lake
Well No. 1 located 1,650 feet from the North line and 2,510 feet
from the west line of Section 18, T25S, R34E.

2. The only other operator in the subject area with a
producing Devonian well is Conoco with a well located 660 feet
from the South line and 1,980 feet from the East line of
Section 6. Conoco has no opposition to said application pro-
vided its subject well is grandfathered as to location and
acreage.

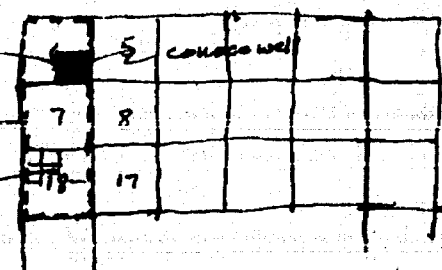
3. The existing rules for the subject pool were established
on March 1, 1962 by Division Order No. R-2187, and include a
provision for 160-acre spacing.

present pool

-1-

*proposed
extension*

BTA
Well
1650' SUL
2510' FWL



4. Applicant seeks the promulgation of amendments to the existing pool rules based upon its belief that the subject pool will be more effectively and efficiently developed on 640-acre spacing and that the subject wells are more likely to develop and produce 640 acres than 160 acres.

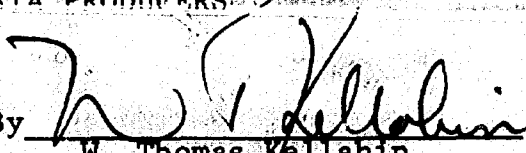
5. The subject pool rules were adopted prior to the adoption of Commission Order No. R-2707 dated May 25, 1964 which amended Rule 4 of the Commission Rules and Regulations to provide that "all gas pools of Pennsylvanian age or older in Southeast New Mexico which were created and defined on June 1, 1964 or later shall have 320 acre spacing..."

6. That one well in the subject pool will efficiently and economically drain and develop a 640-acre unit and the inclusion of a 640-acre spacing unit with well locations no closer than 1,650 feet from the outer boundary lines, nor closer than 330 from a governmental quarter-quarter section plus the extension of the pool to include Section 6, 7, and 18 will not cause waste nor violate correlative rights and should be approved.

WHEREFORE Applicant requests that this matter be set for hearing before the Division's examiner and that after notice and hearing the Application be granted as requested.

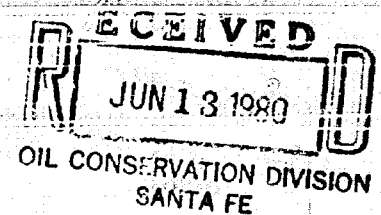
BY PRODUCERS

By


W. Thomas Kellahin
KELLAHIN & KELLAHIN
P. O. Box 1769
Santa Fe, New Mexico 87501
Phone: 505-982-4285
ATTORNEYS FOR APPLICANT

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

IN THE MATTER OF THE APPLICATION OF
BTA OIL PRODUCERS FOR AMENDMENT TO
THE NORTH BELL LAKE DEVONIAN GAS POOL
RULES TO PROVIDE FOR 640-ACRE SPACING
AND FOR EXTENSION OF THE HORIZONTAL
LIMITS OF SAID POOL, LEA COUNTY,
NEW MEXICO



Case 6962

AMENDED APPLICATION

COMES NOW BTA OIL PRODUCERS, by and through its attorneys, KELLAHIN & KELLAHIN, and applies to the New Mexico Oil Conservation Division for Amendment to the North Bell Lake Devonian Gas Pool Rules to provide for 640-acre spacing, for well locations no closer than 1,650 feet from the outer boundaries of a unit not closer than 330 feet to a governmental quarter-quarter section, and for extension of said pool to include all of Section 6, 7, and 18 of T23S, R34E, NMPM, Lea County, New Mexico, and in support thereof would show:

1. Applicant is the operator of the 7909 JV-P Bell Lake Well No. 1 located 1,650 feet from the North line and 2,510 feet from the west line of Section 18, T25S, R34E.
2. The only other operator in the subject area with a producing Devonian well is Conoco with a well located 660 feet from the South line and 1,980 feet from the East line of Section 6. Conoco has no opposition to said application provided its subject well is grandfathered as to location and acreage.
3. The existing rules for the subject pool were established on March 1, 1962 by Division Order No. R-2187, and include a provision for 160-acre spacing.


4. Applicant seeks the promulgation of amendments to the existing pool rules based upon its belief that the subject pool will be more effectively and efficiently developed on 640-acre spacing and that the subject wells are more likely to develop and produce 640 acres than 160 acres.

5. The subject pool rules were adopted prior to the adoption of Commission Order No. R-2707 dated May 25, 1964 which amended Rule 4 of the Commission Rules and Regulations to provide that "all gas pools of Pennsylvanian age or older in Southeast New Mexico which were created and defined on June 1, 1964 or later shall have 320 acre spacing..."

6. That one well in the subject pool will efficiently and economically drain and develop a 640-acre unit and the inclusion of a 640-acre spacing unit with well locations no closer than 1,650 feet from the outer boundary lines, nor closer than 330 from a governmental quarter-quarter section plus the extension of the pool to include Section 6, 7, and 18 will not cause waste nor violate correlative rights and should be approved.

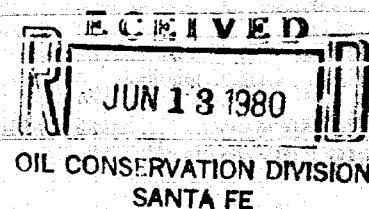
WHEREFORE Applicant requests that this matter be set for hearing before the Division's examiner and that after notice and hearing the Application be granted as requested.

BTA PRODUCERS

By 
W. Thomas Kellahin
KELLAHIN & KELLAHIN
P. O. Box 1769
Santa Fe, New Mexico 87501
Phone: 505-982-4285
ATTORNEYS FOR APPLICANT

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

IN THE MATTER OF THE APPLICATION OF
BTA OIL PRODUCERS FOR AMENDMENT TO
THE NORTH BELL LAKE DEVONIAN GAS POOL
RULES TO PROVIDE FOR 640-ACRE SPACING
AND FOR EXTENSION OF THE HORIZONTAL
LIMITS OF SAID POOL, LEA COUNTY,
NEW MEXICO



Case 6962

AMENDED APPLICATION

COMES NOW BTA OIL PRODUCERS, by and through its attorneys, KELLAHIN & KELLAHIN, and applies to the New Mexico Oil Conservation Division for Amendment to the North Bell Lake Devonian Gas Pool Rules to provide for 640-acre spacing, for well locations no closer than 1,650 feet from the outer boundaries of a unit not closer than 330 feet to a governmental quarter-quarter section, and for extension of said pool to include all of Section 6, 7, and 18 of T23S, R34E, NMPM, Lea County, New Mexico, and in support thereof would show:

1. Applicant is the operator of the 7909 JV-P Bell Lake Well No. 1 located 1,650 feet from the North line and 2,510 feet from the west line of Section 18, T25S, R34E.
2. The only other operator in the subject area with a producing Devonian well is Conoco with a well located 660 feet from the South line and 1,980 feet from the East line of Section 6. Conoco has no opposition to said application provided its subject well is grandfathered as to location and acreage.
3. The existing rules for the subject pool were established on March 1, 1962 by Division Order No. R-2187, and include a provision for 160-acre spacing.


4. Applicant seeks the promulgation of amendments to the existing pool rules based upon its belief that the subject pool will be more effectively and efficiently developed on 640-acre spacing and that the subject wells are more likely to develop and produce 640 acres than 160 acres.

5. The subject pool rules were adopted prior to the adoption of Commission Order No. R-2707 dated May 25, 1964 which amended Rule 4 of the Commission Rules and Regulations to provide that "all gas pools of Pennsylvanian age or older in Southeast New Mexico which were created and defined on June 1, 1964 or later shall have 320 acre spacing..."

6. That one well in the subject pool will efficiently and economically drain and develop a 640-acre unit and the inclusion of a 640-acre spacing unit with well locations no closer than 1,650 feet from the outer boundary lines, nor closer than 330 from a governmental quarter-quarter section plus the extension of the pool to include Section 6, 7, and 18 will not cause waste nor violate correlative rights and should be approved.

WHEREFORE Applicant requests that this matter be set for hearing before the Division's examiner and that after notice and hearing the Application be granted as requested.

BTA PRODUCERS

By 
W. Thomas Kellahin
KELLAHIN & KELLAHIN
P. O. Box 1769
Santa Fe, New Mexico 87501
Phone: 505-982-4285
ATTORNEYS FOR APPLICANT

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. 6962

Order No. R-1421

APPLICATION OF BTA OIL PRO-
DUCERS FOR SPECIAL POOL
RULES AND POOL EXTENSION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 9,
19 80, at Santa Fe, New Mexico, before Examiner DSN

NOW, on this Aug 7 day of July, 19 80, 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, BTA Oil Producers,
~~they~~ has completed its 7909 JV-P Well No. 1
located 1650 feet from the North line and
2510 feet from the West line of Section 18,
Township 23 South, Range 34 East, NMPM, Lea
County, New Mexico as a gas well in the
Devonian formation, perforating through
perforations from 14,660 feet to 14,708 feet.

(3) That said well is located approximately 1.5 miles south of the Continental Oil Co. Well Lake Unit Well No. 6, which is ~~in~~ in Unit 2 of Section 6 of said Township 23 South, Range 34 East, and for which the North Bee Lake-Devonian Gas Pool was created and defined, by the Division March 1, 1962, comprising the SE 1/4 of said Section 6.

(4) That the applicant seeks the extension of said North Bee Lake-Devonian Gas Pool to include its 7909 JV-P Well No. 1, and further seeks the promulgation of special rules and regulations for said pool including a provision for 640-acre spacing and specified well locations.

(5) That the evidence presently available indicates that said Bee Lake Unit Well No. 6 and Applicant's 7909 JV-P Well No. 1 are in ~~fact~~ ^{and} both producing from a ^{single} common source of supply in the Devonian formation and that said North Bee Lake-Devonian Gas Pool should be extended to take in said 7909 JV-P Well No. 1.

(6) That the evidence further indicates that one well in said North Bee Lake-Devonian Gas Pool is capable of draining 640 acres and that 640-acre spacing and proration units should be established for said pool with well locations for future wells to be no closer than 1600 feet to the outer boundary of the unit, and no closer than 800 feet to any quarter-quarter section line.

(7) That an order embodying the above findings is in the interest of conservation, that same best will prevent waste, will be unpair but will protect correlation and should be approved.

IT IS THEREFORE ORDERED:

(1) That the North Bell Lake-Devonian Gas Pool in Lea County, New Mexico, as hereby created, defined, and described, is hereby extended to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPA

Section 6: N/2 and SW/4

Section 7: A11

Section 18: A11

(2) That Special Rules and Regulations for said North Bell Lake-Devonian Gas Pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS
FOR THE
NORTH BELL LAKE-DEVONIAN GAS POOL**

RULE 1. Each well completed or recompleted in the North Bell Lake-Devonian Gas Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another designated Devonian gas pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, consisting of a governmental section.

RULE 3. The Director of the Division may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental section and contains less acreage than a standard unit.
- (c) The applicant present written consent in the form of waivers from all offset operators and from all operators owning interests in the section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Division Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Director has received the application.

RULE 4. Each well shall be located no nearer than 1650 feet to the outer boundary of the section and no nearer than 330 feet to any governmental quarter-quarter section line.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to a deeper horizon. All operators offsetting the proration unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the ~~North Ben Lake~~ Devonian Gas Pool or in the Devonian formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District office of the Division in writing of the name and location of the well on or before ~~December 15, 1979~~ *September 1, 1980*.

(2) That, pursuant to Paragraph A. of Section 70-2-18, NMSA 1978, contained in Chapter 271, Laws of 1969, existing wells in the ~~North Ben Lake~~ Devonian Gas Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 640 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the ~~North Ben Lake~~ Devonian Gas Pool or in the Devonian formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(3) Jurisdiction

DONE at . . .