

CASE NO.

6510

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
28 March 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Cor-) CASE
poration for an unorthodox gas well) 6510
location, Eddy County, New Mexico.)

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant: Joel Carson, Esq.
LOSEE, CARSON & DICKERSON P.A.
Artesia, New Mexico

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

I N D E X

MARK WILSON

| | |
|----------------------------------|---|
| Direct Examination by Mr. Carson | 4 |
| Cross Examination by Mr. Stamets | 8 |

E X H I B I T S

| | |
|--|---|
| Applicant Exhibit One, Plat | 4 |
| Applicant Exhibit Two, Structure Map | 5 |
| Applicant Exhibit Three, Cross Section | 6 |

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

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. STAMETS: We'll call next Case 6510.

MS. TESCHENDORF: Case 6510. Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.

MR. CARSON: Mr. Examiner, my name is Joel Carson, Losee, Carson and Dickerson, P. A., Artesia, New Mexico, appearing on behalf of the applicant, and I have one witness who has not yet been sworn.

MR. STAMETS: Okay, will you stand and be sworn, please?

(Witness sworn.)

MARK WILSON

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

DIRECT EXAMINATION

BY MR. CARSON:

Q. Will you state your name, please?

A. Mark Wilson.

Q. And by whom are you employed, Mr. Wilson?

A. I'm self employed.

Q. But you appear here on behalf of Yates Petroleum Corporation?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (606) 471-2462
Santa Fe, New Mexico 87501

1 A. That's correct.

2 Q. As a consulting geologist, is that correct?

3 A. You've got it.

4 Q. And have you previously testified before

5 this Commission?

6 A. Yes, I have.

7 Q. And have your qualifications been acceptable?

8 A. Yes, they have.

9 MR. CARSON: Are the witness' qualifications

10 accepted?

11 MR. STAMETS: They are.

12 Q. (Mr. Carson continuing.) Mr. Wilson, would

13 you tell the Examiner the purpose of this hearing?

14 Or this application?

15 A. In Case 6510 Yates Petroleum Corporation,

16 operator for the Rio Pecos working interest unit, requests

17 approval for the unorthodox Morrow gas well location of

18 its Rio Pecos Federal KO Well No. 1, to be drilled 660 from

19 the north line, 1300 feet from the east line of Section 28,

20 Township 18 South, Range 27 East, Red Lake Field, Eddy

21 County, New Mexico; the east half of said Section 28 is to

22 be dedicated to the well.

23 Q. Mr. Wilson, I'm going to refer you to

24 Applicant's Exhibit Number One and ask you to identify that

25 exhibit and explain what it shows.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (606) 471-2462
Santa Fe, New Mexico 87601

1 A Exhibit One is a land plat showing the
2 proposed location in red. The outline of the Rio Pecos Unit
3 also in red. The farm-in from the Huber Corporation and
4 the spacing unit in green, and the Federal lease, which ex-
5 pires 7-1-79 in yellow.

6 Q Okay, and you have a notation on here with
7 an arrow that shows the proposed location --

8 A Right.

9 Q -- is that correct?

10 I refer you to Applicant's Exhibit Number
11 Two and ask you to identify that location -- or that exhibit
12 and explain what it shows.

13 A Exhibit Number Two shows in solid contours,
14 50-foot contour interval, the total thickness of the Morrow
15 series, the Pennsylvanian system, and in dashed contours,
16 which are 100-foot contours, the structure at the base of
17 the lower Strawn limestone, or the top of the Atoka series.

18 The proposed drill site, shown on here in
19 red, and it's in a pronounced Morrow thick, an alluvial
20 valley carved into the Chester shale section, which trends
21 north/south and northwest/southeast. This location is ex-
22 pected to encounter the lower Morrow Hanagan-Campbell sand-
23 stone, found in the Hanagan Well in Section 34, 18, 27,
24 where it is 50 feet thick, and in the Hanagan well in Sec-
25 tion 3 of 19 South, 27 East, where it is 56 feet thick.

1 This channel is shown in pink on Exhibit
2 Two. Our proposed location should be about 140 feet high
3 to the gas shows, accompanied by water, in the Hanagan well
4 on Section 34.

5 This location may also find additional
6 channel sandstone, such as those found in Yates Pecos River
7 Deep Unit No. 5 in Section 22 of 19 South, 22 East. These
8 sands are stratigraphically lower than the Hanagan channel
9 sandstones. Their trend is shown by the orange lines on
10 Exhibit Two.

11 Q Now, Mr. Wilson, I'll refer you to Applicant's
12 Exhibit Number Three and ask you to identify that and ex-
13 plain what it purports to show.

14 A Exhibit Three is a cross section, 5-well
15 stratigraphic cross section, of the Morrow and Chester
16 series. Locations of Wells 1 through 5 on this cross sec-
17 tion are shown in green on Exhibit Two.

18 The top of the Morrow series is shown in
19 brown and the top of the Chester shale in grey. The Hanagan
20 channel sandstone is colored pink and two over channel sand-
21 stones are shown in orange ochre and magenta.

22 The proposed drill site is between Wells 2
23 and 3 on this cross section in a thick alluvial valley in-
24 dicated by Well 2 and shown also by Wells 4 and 5.

25 The Hanagan channel sandstone is shown in

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

1 wells 4 and 5 and is interpreted between wells 2 and 3 at
2 the proposed drill stie, along with two lower channel sand-
3 stones.

4 To summarize, the proposed drill site would
5 seem to offer one, a chance to hit the Hanagan channel
6 sandstone 140 feet high with gas shows accompanied by water
7 in the well in Section 34; two, the best chance to protect
8 the 200 acres Federal leases -- the Federal lease 9817 in
9 the south half of Section 28, whose primary term expires
10 on 7-1-79; and three, the correlative rights of the royalty
11 owners on Section 28 should be best protected by this drill
12 site by affording the best chance to complete a Morrow
13 gas well.

14 Q Mr. Wilson, were Applicant's Exhibits Num-
15 ber One through Three prepared by you or under your super-
16 vision?

17 A They were prepared by me.

18 MR. CARSON: I'd like to move the introduction
19 of these exhibits.

20 MR. STAMETS: These exhibits will be ad-
21 mitted.

22 Q Mr. Wilson, in your professional opinion
23 will the granting of this application protect correlative
24 rights, prevent waste, and prevent the drilling of unnec-
25 cesary number of wells?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (001) 471-3462
Santa Fe, New Mexico 87501

A. I think it will.

MR. CARSON: We have no further questions of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Wilson, why is this location better than say, a standard location 1980 from the north and 660 from the east of the section?

A. 1980 from the north and 660 from the east?

Q Uh-huh.

A. Okay. The principal reason that we want to get as far north in this half section as we could is that we need to get substantially high to the Hanagan Well in Section 34, where you'll notice on a drill stem test data that I have here on Exhibit Two, that they got a gas show, they got gas to the surface in 60 minutes too small to measure. Then they recovered 8400 feet of salt water, and whereas, if you go down to the well in Section 3 in 19, 27, the drill stem test there has indicated no shows, only water, 3150 feet of salt water, and if we go up to the far north part of that half section, we're going to be probably 130, 140 feet high to this well that had the gas show, and I would feel it would be quite risky to drill in any lower structural position.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (606) 471-2462
Santa Fe, New Mexico 87501

1 MR. STAMETS: Okay. Any other questions
2 of the witness? He may be excused.

3 Anything further in this case?

4 The case will be taken under advisement.

5 (Hearing concluded.)
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3050 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY
CERTIFY that the foregoing and attached Transcript of
Hearing before the Oil Conservation Division was reported
by me; that said transcript is a full, true, and correct
record of the hearing, prepared by me to the best of my
ability, knowledge, and skill, from my notes taken at the
time of the hearing.

Sally W. Boyd
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. 6510,
heard by me on 3-28, 1979.

Richard L. Hunt, Examiner
Oil Conservation Division

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (905) 471-2462
Santa Fe, New Mexico 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
28 March 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Cor-) CASE
poration for an unorthodox gas well) 6510
location, Eddy County, New Mexico.)

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant: Joel Carson, Esq.
LOSEE, CARSON & DICKERSON P.A.
Artesia, New Mexico

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (805) 471-2462
Santa Fe, New Mexico 87501

I N D E X

MARK WILSON

Direct Examination by Mr. Carson 4

Cross Examination by Mr. Stamets 3

E X H I B I T S

Applicant Exhibit One, Plat 4

Applicant Exhibit Two, Structure Map 5

Applicant Exhibit Three, Cross Section 6

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

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. STAMETS: We'll call next Case 6510.

MS. TESCHENDORF: Case 6510. Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.

MR. CARSON: Mr. Examiner, my name is Joel Carson, Losee, Carson and Dickerson, P. A., Artesia, New Mexico, appearing on behalf of the applicant, and I have one witness who has not yet been sworn.

MR. STAMETS: Okay, will you stand and be sworn, please?

(Witness sworn.)

MARK WILSON

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

DIRECT EXAMINATION

BY MR. CARSON:

Q Will you state your name, please?

A Mark Wilson.

Q And by whom are you employed, Mr. Wilson?

A I'm self employed.

Q But you appear here on behalf of Yates Petroleum Corporation?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (606) 471-2462
Santa Fe, New Mexico 87501

1 A. That's correct.

2 Q. As a consulting geologist, is that correct?

3 A. You've got it.

4 Q. And have you previously testified before
5 this Commission?

6 A. Yes, I have.

7 Q. And have your qualifications been acceptable?

8 A. Yes, they have.

9 MR. CARSON: Are the witness' qualifications
10 accepted?

11 MR. STAMETS: They are.

12 Q. (Mr. Carson continuing.) Mr. Wilson, would
13 you tell the Examiner the purpose of this hearing?

14 Or this application?

15 A. In Case 6510 Yates Petroleum Corporation,
16 operator for the Rio Pecos working interest unit, requests
17 approval for the unorthodox Morrow gas well location of
18 its Rio Pecos Federal KO Well No. 1, to be drilled 660 from
19 the north line, 1300 feet from the east line of Section 28,
20 Township 18 South, Range 27 East, Red Lake Field, Eddy
21 County, New Mexico; the east half of said Section 28 is to
22 be dedicated to the well.

23 Q. Mr. Wilson, I'm going to refer you to
24 Applicant's Exhibit Number One and ask you to identify that
25 exhibit and explain what it shows.

1 A Exhibit One is a land plat showing the
2 proposed location in red. The outline of the Rio Pecos Unit
3 also in red. The farm-in from the Huber Corporation and
4 the spacing unit in green, and the Federal lease, which ex-
5 pires 7-1-79 in yellow.

6 Q Okay, and you have a notation on here with
7 an arrow that shows the proposed location --

8 A Right.

9 Q -- is that correct?

10 I refer you to Applicant's Exhibit Number
11 Two and ask you to identify that location -- or that exhibit
12 and explain what it shows.

13 A Exhibit Number Two shows in solid contours,
14 50-foot contour interval, the total thickness of the Morrow
15 series, the Pennsylvanian system, and in dashed contours,
16 which are 100-foot contours, the structure at the base of
17 the lower Strawn limestone, or the top of the Atoka series.

18 The proposed drill-site, shown on here in
19 red, and it's in a pronounced Morrow thick, an alluvial
20 valley carved into the Chester shale section, which trends
21 north/south and northwest/southeast. This location is ex-
22 pected to encounter the lower Morrow Hanagan-Campbell sand-
23 stone, found in the Hanagan Well in Section 34, 18, 27,
24 where it is 50 feet thick, and in the Hanagan well in Sec-
25 tion 3 of 19 South, 27 East, where it is 56 feet thick.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

1 This channel is shown in pink on Exhibit
2 Two. Our proposed location should be about 140 feet high
3 to the gas shows, accompanied by water, in the Hanagan well
4 on Section 34.

5 This location may also find additional
6 channel sandstone, such as those found in Yates Pecos River
7 Deep Unit No. 5 in Section 22 of 19 South, 22 East. These
8 sands are stratigraphically lower than the Hanagan channel
9 sandstones. Their trend is shown by the orange lines on
10 Exhibit Two.

11 Q Now, Mr. Wilson, I'll refer you to Applicant's
12 Exhibit Number Three and ask you to identify that and ex-
13 plain what it purports to show.

14 A Exhibit Three is a cross section, 3-well
15 stratigraphic cross section, of the Morrow and Chester
16 series. Locations of Wells 1 through 5 on this cross sec-
17 tion are shown in green on Exhibit Two.

18 The top of the Morrow series is shown in
19 brown and the top of the Chester shale in grey. The Hanagan
20 channel sandstone is colored pink and two over channel sand-
21 stones are shown in orange ochre and magenta.

22 The proposed drill site is between Wells 2
23 and 3 on this cross section in a thick alluvial valley in-
24 dicated by Well 2 and shown also by Wells 4 and 5.

25 The Hanagan channel sandstone is shown in

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

1 wells 4 and 5 and is interpreted between wells 2 and 3 at
2 the proposed drill site, along with two lower channel sand-
3 stones.

4 To summarize, the proposed drill site would
5 seem to offer one, a chance to hit the Managan channel
6 sandstone 140 feet high with gas shows accompanied by water
7 in the well in Section 34; two, the best chance to protect
8 the 200 acres Federal leases -- the Federal lease 9817 in
9 the south half of Section 28, whose primary term expires
10 on 7-1-79; and three, the correlative rights of the royalty
11 owners on Section 28 should be best protected by this drill
12 site by affording the best chance to complete a Morrow
13 gas well.

14 Q Mr. Wilson, were Applicant's Exhibits Num-
15 ber One through Three prepared by you or under your super-
16 vision?

17 A They were prepared by me.

18 MR. CARSON: I'd like to move the introduction
19 of these exhibits.

20 MR. STAMETS: These exhibits will be ad-
21 mitted.

22 Q Mr. Wilson, in your professional opinion
23 will the granting of this application protect correlative
24 rights, prevent waste, and prevent the drilling of unnec-
25 cesary number of wells?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SOS) 411-2462
Santa Fe, New Mexico 87501

A. I think is well.

MR. CARSON: We have no further questions of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Wilson, why is this location better than say, a standard location 1980 from the north and 660 from the east of the section?

A. 1980 from the north and 660 from the east?

Q Uh-huh.

A. Okay. The principal reason that we want to get as far north in this half section as we could is that we need to get substantially high to the Hanagan Well in Section 34, where you'll notice on a drill stem test data that I have here on Exhibit Two, that they got a gas show, they got gas to the surface in 60 minutes too small to measure. Then they recovered 8400 feet of salt water, and whereas, if you go down to the well in Section 3 in 19, 27, the drill stem test there has indicated no shows, only water, 3150 feet of salt water, and if we go up to the far north part of that half section, we're going to be probably 130, 140 feet high to this well that had the gas show, and I would feel it would be quite risky to drill in any lower structural position.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
8030 Plaza Blanca (S.O.S.) 471-2442
Santa Fe, New Mexico 87501

1 MR. STANLEY: Okay. Any other questions
2 of the witness? He may be excused.

3 Anything further in this case?

4 The case will be taken under advisement.

5 (hearing concluded.)
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

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. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

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. 6510
Order No. R-5982

APPLICATION OF YATES PETROLEUM
CORPORATION FOR AN UNORTHODOX GAS
WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 28, 1979,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of April, 1979, 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, Yates Petroleum Corporation,
seeks approval of an unorthodox gas well location for its
Rio Pecos Federal "KO" Well No. 1 to be located 660 feet
from the North line and 1300 feet from the East line of
Section 28, Township 18 South, Range 27 East, NMPM, to test
Wolfcamp through Mississippian formations, Eddy County, New
Mexico.

(3) That the E/2 of said Section 28 is to be dedicated
to the well.

(4) That a well at said unorthodox location will better
enable applicant to produce the gas underlying the proration
unit.

(5) That no offset operator objected to the proposed
unorthodox location.

-2-

Case No. 6510
Order No. R-5982

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

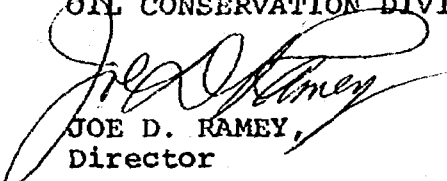
(1) That an unorthodox gas well location for Wolfcamp through Mississippian formations is hereby approved for the Yates Petroleum Corporation Rio Pecos Federal "KO" Well No. 1, to be located 660 feet from the North line and 1300 feet from the East line of Section 28, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(2) That the E/2 of said Section 28 shall be dedicated to the above-described well.

(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 designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY,
Director


S E A L

dr/

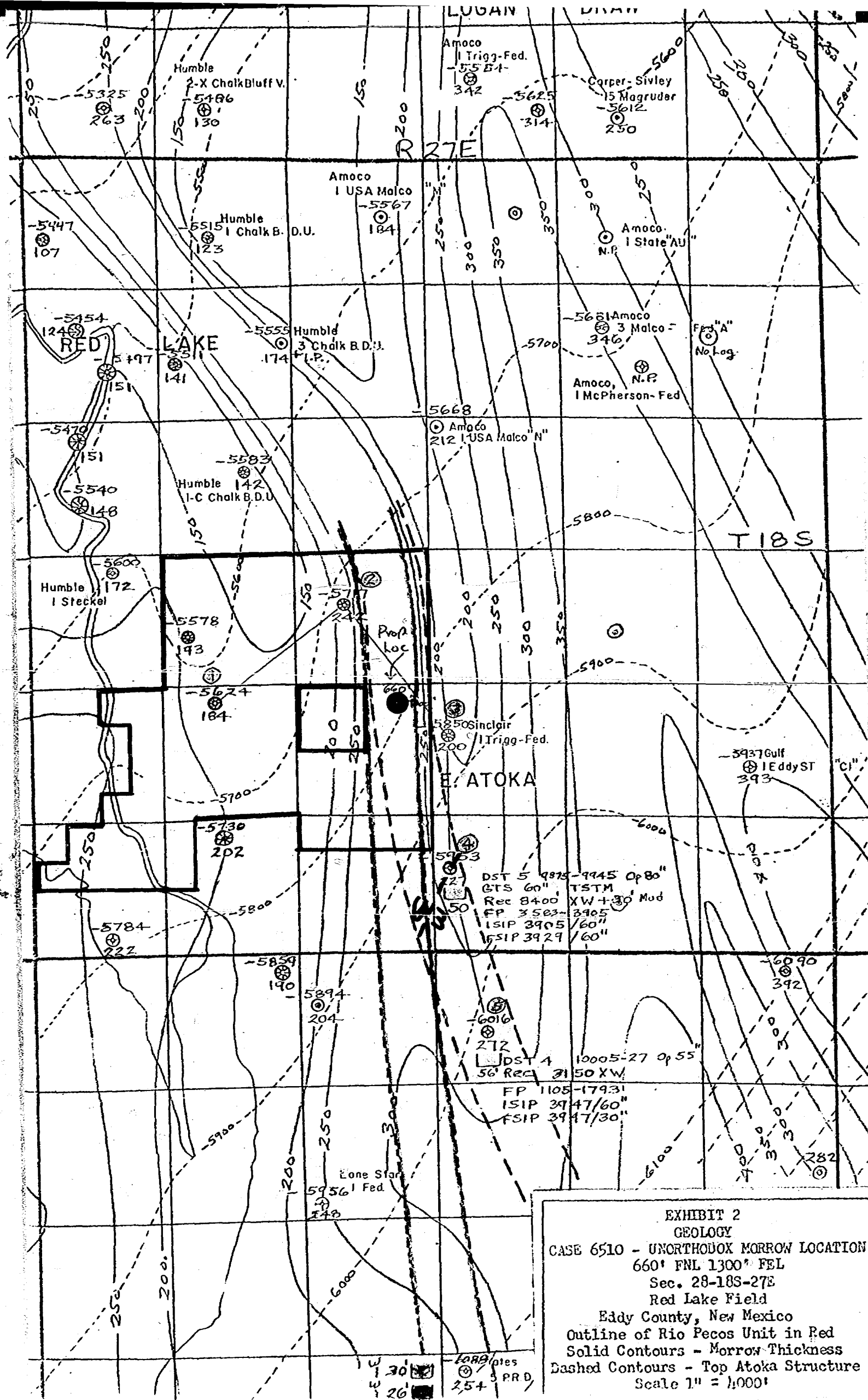


EXHIBIT 2
 GEOLOGY
 CASE 6510 - UNORTHODOX MORROW LOCATION
 660' FNL 1300' FEL
 Sec. 28-18S-27E
 Red Lake Field
 Eddy County, New Mexico
 Outline of Rio Pecos Unit in Red
 Solid Contours - Morrow Thickness
 Dashed Contours - Top Atoka Structure
 Scale 1" = 1000'

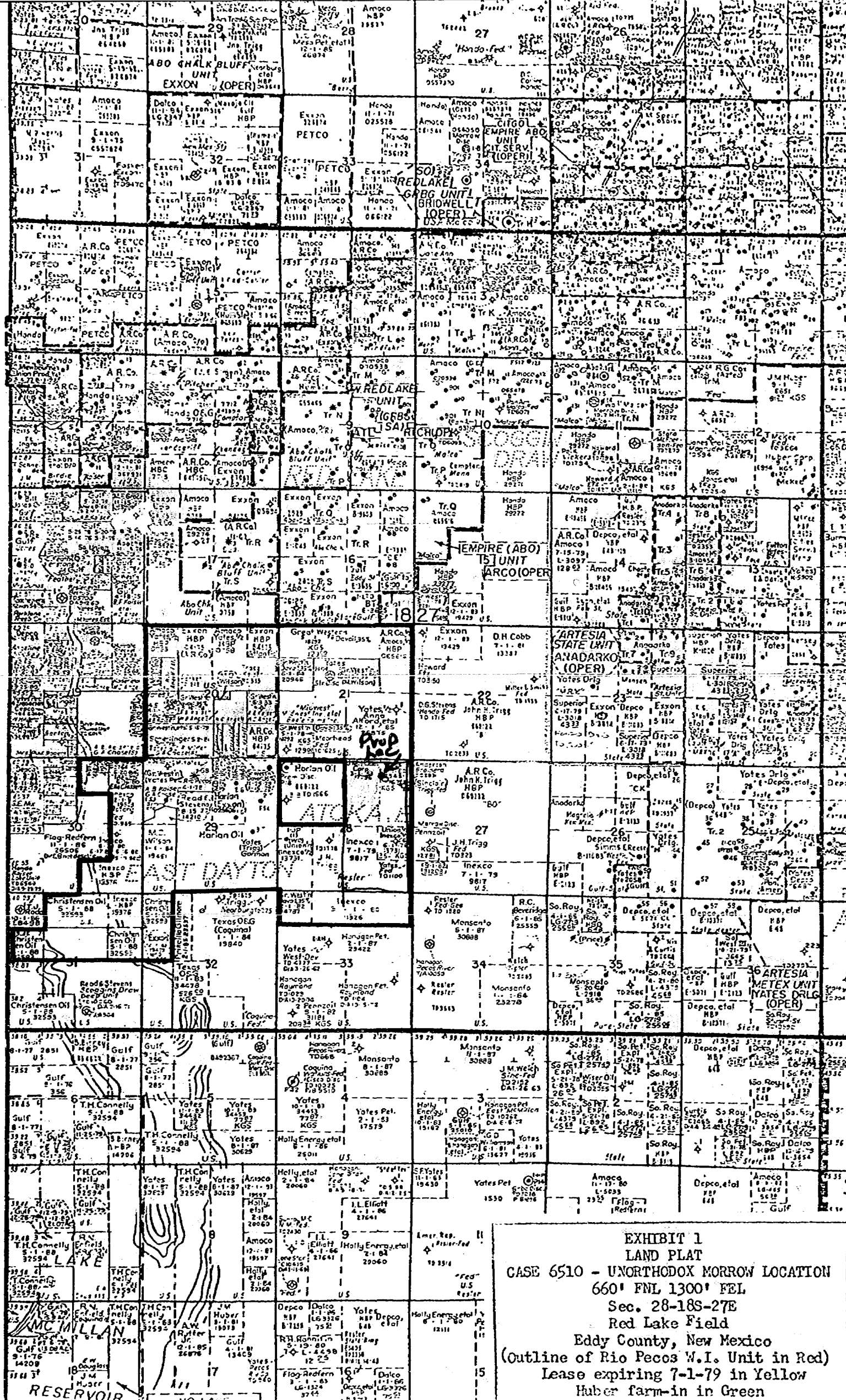


EXHIBIT 1
LAND PLAT
CASE 6510 - UNORTHODOX MORROW LOCATION
660' FNL 1300' FEL
Sec. 28-18S-27E
Red Lake Field
Eddy County, New Mexico
(Outline of Rio Pecos W.I. Unit in Red)
Lease expiring 7-1-79 in Yellow
Huber farm-in in Green

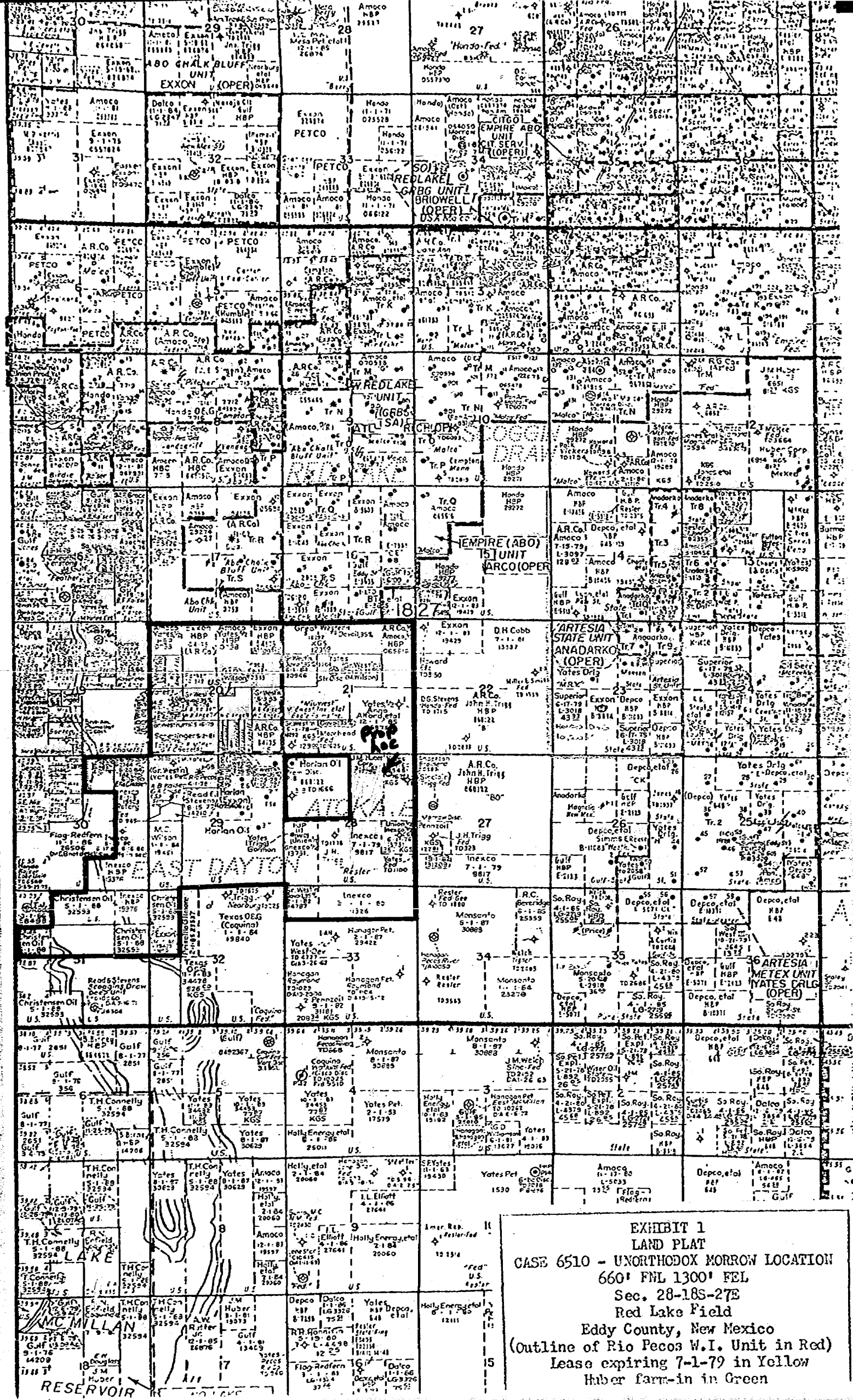


EXHIBIT 1
LAND PLAT
CASE 6510 - UNORTHODOX MORROW LOCATION
660' FNL 1300' FEL
Sec. 28-18S-27E
Red Lake Field
Eddy County, New Mexico
(Outline of Rio Pecos W.I. Unit in Red)
Lease expiring 7-1-79 in Yellow
Huber farm-in in Green

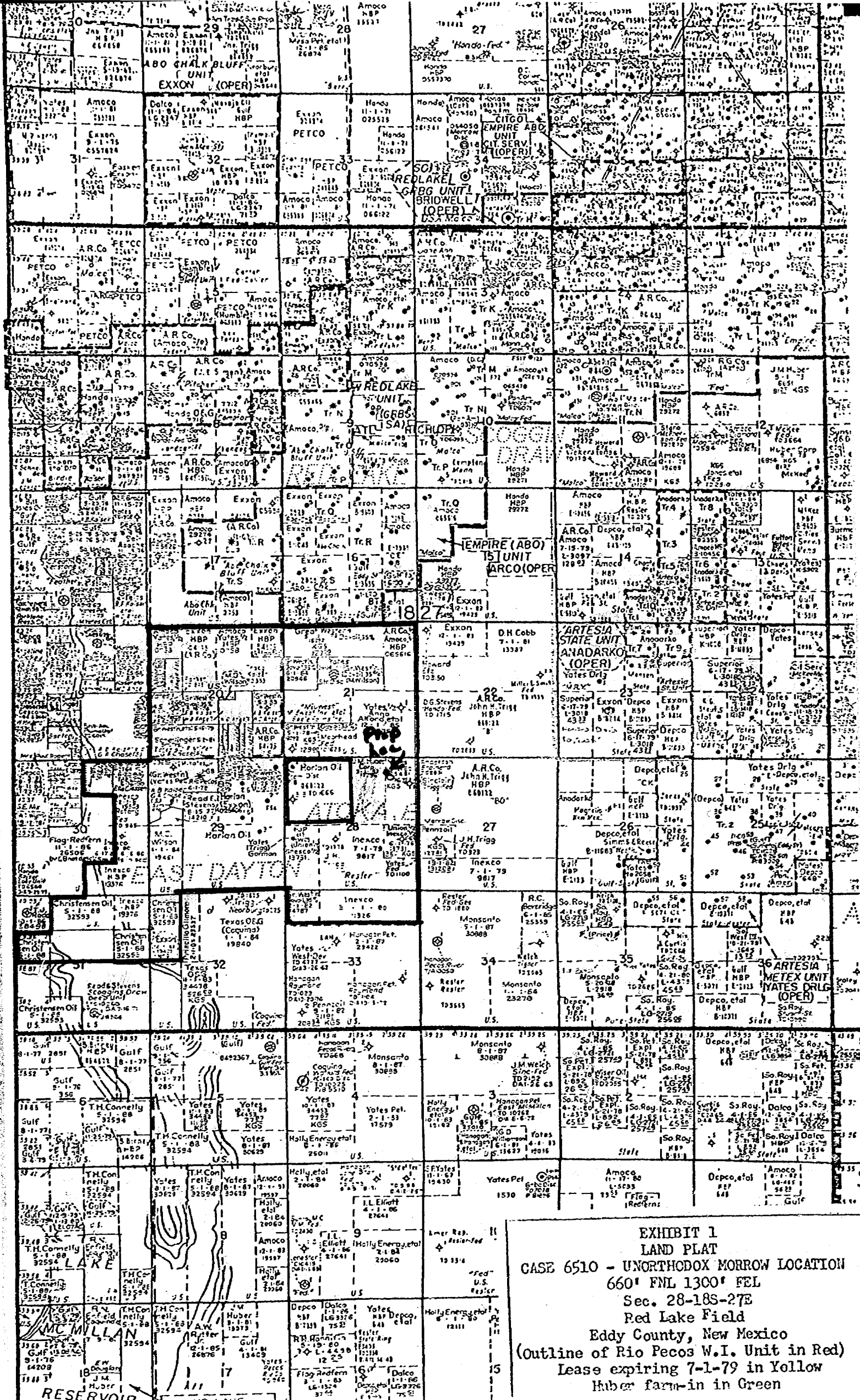


EXHIBIT 1
LAND PLAT
CASE 6510 - UNORTHODOX MORROW LOCATION
660' FNL 1300' FEL
Sec. 28-18S-27E
Red Lake Field
Eddy County, New Mexico
(Outline of Rio Pecos W.I. Unit in Red)
Lease expiring 7-1-79 in Yellow
Huber farm-in in Green

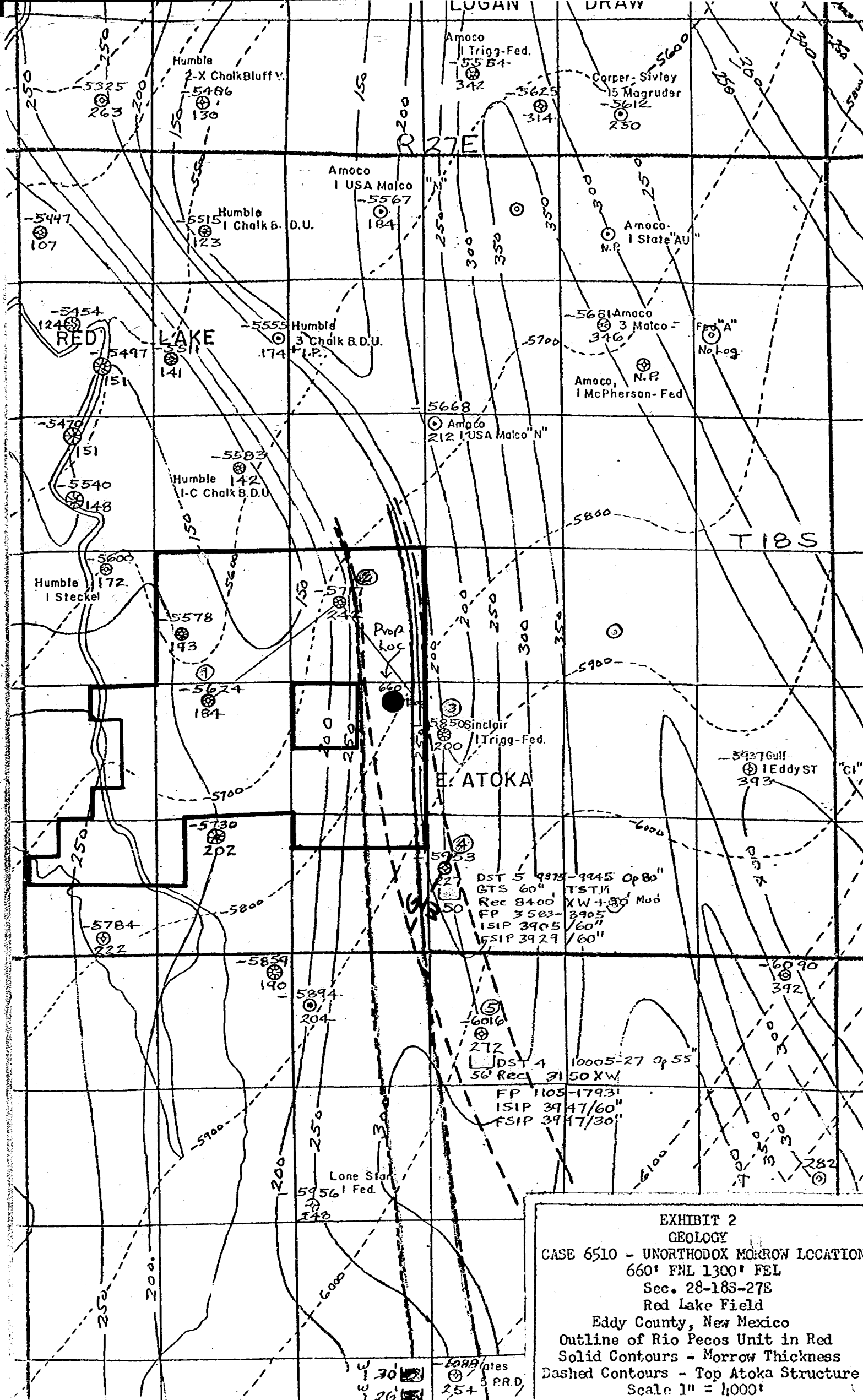


EXHIBIT 2
 GEOLOGY
 CASE 6510 - UNORTHODOX MORROW LOCATION
 660' FNL 1300' FEL
 Sec. 28-18S-27E
 Red Lake Field
 Eddy County, New Mexico
 Outline of Rio Pecos Unit in Red
 Solid Contours - Morrow Thickness
 Dashed Contours - Top Atoka Structure
 Scale 1" = 1,000'

Dockets Nos. 14-79 and 15-79 are tentatively set for hearing on April 11 and 18, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 28, 1979

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

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

- CASE 6500: Application of Gulf Oil Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the Division waived existing well-spacing requirements and found that the drilling of additional wells was necessary to effectively and efficiently drain those portions of the proration units in the Central Drinkard Unit located in Sections 28, 29, 32 and 33, Township 21 South, Range 37 East, Lea County, New Mexico, which could not be so drained by the existing wells.
- CASE 6501: Application of Delta Drilling Company for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the Williamson State Unit Well No. 1, the surface location of which is 660 feet from the North and West lines of Section 30, Township 16 South, Range 33 East, Lea County, New Mexico, and directionally drill said well in such a manner as to bottom it in the Morrow formation within 100 feet of a point 1980 feet from the North and West lines of said Section 30, the N/2 of the section to be dedicated to the well.
- CASE 6502: Application of Stevens Oil Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the SW/4 SW/4 of Section 30, Township 8 South, Range 29 East, Chaves County, New Mexico, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6503: Application of Sundance Oil Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation through the perforated interval from 4207 feet to 4228 feet in its Cone Federal Well No. 8 located in Unit P of Section 31, Township 7 South, Range 32 East, Tomahawk-San Andres Pool, Roosevelt County, New Mexico.
- CASE 6504: Application of Phoenix Resources Company for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Buckhorn Canyon Unit Area No. 2, comprising 23,009 acres, more or less, of Federal and State lands in Township 19 South, Ranges 19 and 20 East, Chaves County, New Mexico.
- CASE 6505: Application of Doyle Hartman for vertical pool limit redefinition, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order extending the vertical limits of the Langlie Mattix Pool in Lea County, New Mexico, to include the lowermost 200 feet of the Seven Rivers formation and the concomitant contraction of the vertical limits of the Jalmat Gas Pool underlying the following described lands in Township 23 South, Range 36 East: Section 35: SW/4, S/2 SE/4, and NW/4 SE/4; Section 36: W/2 SW/4; and in Township 24 South, Range 36 East: Section 1: NW/4, S/2 NE/4, and NW/4 NE/4; Section 2: W/2.
- CASE 6506: Application of Bedford, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Ram Well No. 1-A located in Unit G of Section 8, Township 26 North, Range 12 West, WAW-Fruitland Pictured Cliffs Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.
- CASE 6507: Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its Hanlad State Well No. 1 located in Unit K of Section 2, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.
- CASE 6508: Application of Harvey E. Yates Company for an unorthodox well location and a non-standard proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 62.75-acre non-standard gas proration unit comprising Lots 1 and 2 of Section 19, Township 18 South, Range 29 East, Eddy County, New Mexico, to be dedicated to its Depco Federal Well No. 1 to be located 330 feet from the North line and 660 feet from the West line of said Section 19.

CASE 6509: Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order creating a new gas pool in the Yates formation for its Depeco Federal Well No. 1 located in Unit D of Section 19, Township 18 South, Range 29 East, Eddy County, New Mexico, and for promulgation of special pool rules, including provision for 80-acre gas well spacing.

CASE 6480: (Continued from February 28, 1979, Examiner Hearing)

Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its State 22 Well No. 1 located in Unit P of Section 22, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.

CASE 6482: (Continued from February 28, 1979, Examiner Hearing)

Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its Mobil 27 State Well No. 1 located in Unit A of Section 27, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.

CASE 6072: (Continued from March 14, 1979, Examiner Hearing)

In the matter of Case 6072 being reopened pursuant to the provisions of Order No. R-5643 which order created the Travis-Upper Pennsylvanian Pool, Eddy County, New Mexico, with provisions for 80-acre spacing. All interested parties may appear and show cause why the Travis-Upper Pennsylvanian Pool should not be developed on 40-acre spacing units.

CASE 6492: (Continued from March 14, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NE/4 NW/4 of Section 13, Township 17 South, Range 25 East, Eddy County, New Mexico, 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6510: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location for the Wolfcamp through Mississippian formations of its Rio Pecos Federal "KO" Well No. 1, to be located 660 feet from the North line and 1300 feet from the East line of Section 28, Township 18 South, Range 27 East, Eddy County, New Mexico, the E/2 of said Section 28 to be dedicated to the well.

CASE 6511: Application of Yates Petroleum Corporation for a dual completion and downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Tom Brown "GO" Com. Well No. 1 located in Unit C of Section 22, Township 17 South, Range 26 East, Kennedy Farms Field, Eddy County, New Mexico, to produce gas from the Lower Morrow formation through tubing and to commingle and produce the Strawn and Upper Morrow zones in the annulus of said well.

CASE 6512: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Hilliard "BF" Federal Well No. 2, to be located 330 feet from the North line and 2310 feet from the West line of Section 14, Township 21 South, Range 22 East, to test the Wolfcamp through Mississippian formations, Eddy County, New Mexico, the W/2 of said Section 14 to be dedicated to the well.

CASE 6513: Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Atoka and Morrow production in the wellbore of its Stebbins CQ Fed. Well No. 1 located in Unit B of Section 20, Township 20 South, Range 29 East, East Burton Flats Field, Eddy County, New Mexico.

CASE 6514: Application of Yates Petroleum Corporation for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of North Burton Flats-Atoka and East Burton Flats-Morrow production in the wellbore of its Williamson BC Fed. Well No. 4 located in Unit K of Section 7, Township 20 South, Range 29 East, Eddy County, New Mexico.

CASE 6515: Application of Southland Royalty Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the W/2 of Section 31, Township 31 North, Range 11 West, San Juan County, New Mexico, to be dedicated to its Grenier Well No. 23 drilled at a location 1190 feet from the South and West lines of said Section 31. 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. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6516: Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Maduro Unit Area, comprising 2,560 acres, more or less, of Federal and State lands in Township 19 South, Range 33 East, Lea County, New Mexico.

CASE 6452: (Continued and Readvertised)

Application of Burleson & Huff for a non-standard gas proration unit and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SW/4 of Section 25, Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico. Applicant further seeks a finding that the recompletion of its Harrison Well No. 2 located in Unit N or in the alternative, the drilling of its Harrison Well No. 4 in Unit L, of Section 25 is necessary to effectively and efficiently drain that portion of the previously approved 160-acre proration unit which cannot be drained by the old unit well.

A. J. LOSEE
JOEL M. CARSON
CHAD DICKERSON

LAW OFFICES
LOSEE & CARSON, P.A.
300 AMERICAN HOME BUILDING
P. O. DRAWER 239
ARTESIA, NEW MEXICO 88210

AREA CODE 505
746-3508

RECEIVED
MARCH 13 1979
OIL CONSERVATION DIVISION
SANTA FE

5 March 1979

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

Dear Mr. Ramey:

Enclosed for filing, please find three copies each of two Applications of Yates Petroleum Corporation for unorthodox gas well locations for its Rio Pecos Federal "KO" No. 1 Well and its Hilliard "BF" Federal No. 2 Well in Eddy County, New Mexico.

We ask that these cases be set for hearing before an examiner on March 28, 1979 and that we be furnished with a copy of the docket for said hearings.

Yours truly,

LOSEE, CARSON & DICKERSON, P.A.


Joel M. Carson

JMC:bjm
Enclosures

cc w/enclosures: Yates Petroleum Corporation

BEFORE THE OIL CONSERVATION DIVISION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
YATES PETROLEUM CORPORATION FOR AN
UNORTHODOX GAS WELL LOCATION, EDDY
COUNTY, NEW MEXICO

CASE NO. 6510

APPLICATION

COMES NOW YATES PETROLEUM CORPORATION, by its attorneys,
and in support hereof, respectfully states:

1. Applicant is the operator of the Wolfcamp through
the Mississippian formations underlying:

Township 18 South, Range 27 East, N.M.P.M.

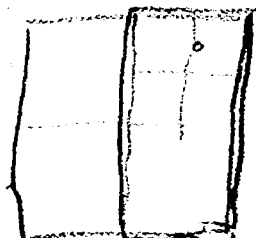
Section 28: E/2

and proposes to drill its Rio Pecos Federal "KO" No. 1 Well at a
point located 1,300 feet from the East line and 660 feet from the
North line of said Section 28.

2. The applicant seeks an exception to the well loca-
tion requirements of Rule 104-C.2(a) of the Oil Conservation
Division to permit the drilling of the well at the above men-
tioned unorthodox location to a depth sufficient to adequately
test the Wolfcamp through the Mississippian formations.

3. A standard 320-acre gas proration unit comprising
the E/2 of said Section 28 should be dedicated to such well or
to such lesser portion thereof as is reasonably shown to be
reasonably productive of gas.

4. The approval of this application will afford
applicant the opportunity to produce its just and equitable



share of gas, will prevent economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

WHEREFORE, applicant prays:

A. That this application be set for hearing before an examiner and that notice of said hearing be given as required by law.

B. That upon hearing the Division enter its order granting applicant permission to drill a well 1,300 feet from the East line and 660 feet from the North line of said Section 28 and to dedicate the E/2 of Section 28, which is reasonably presumed to be productive of gas from the Wolfcamp through the Mississippian formations.

C. And for such other relief as may be just in the premises.

YATES PETROLEUM CORPORATION

By: 

Joel M. Carson

LOSEE, CARSON & DICKERSON, P.A.
P. O. ~~Drawer~~ 239
Artesia, New Mexico 88210

Attorneys for Applicant

BEFORE THE OIL CONSERVATION DIVISION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF :
YATES PETROLEUM CORPORATION FOR AN :
UNORTHODOX GAS WELL LOCATION, EDDY :
COUNTY, NEW MEXICO :

CASE NO. 6510

APPLICATION

COMES NOW YATES PETROLEUM CORPORATION, by its attorneys,
and in support hereof, respectfully states:

1. Applicant is the operator of the Wolfcamp through
the Mississippian formations underlying:

Township 18 South, Range 27 East, N.M.P.M.

Section 28: E/2

and proposes to drill its Rio Pecos Federal "KO" No. 1 Well at a
point located 1,300 feet from the East line and 660 feet from the
North line of said Section 28.

2. The applicant seeks an exception to the well loca-
tion requirements of Rule 104-C.2(a) of the Oil Conservation
Division to permit the drilling of the well at the above men-
tioned unorthodox location to a depth sufficient to adequately
test the Wolfcamp through the Mississippian formations.

3. A standard 320-acre gas proration unit comprising
the E/2 of said Section 28 should be dedicated to such well or
to such lesser portion thereof as is reasonably shown to be
reasonably productive of gas.

4. The approval of this application will afford
applicant the opportunity to produce its just and equitable

share of gas, will prevent economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

WHEREFORE, applicant prays:

A. That this application be set for hearing before an examiner and that notice of said hearing be given as required by law.

B. That upon hearing the Division enter its order granting applicant permission to drill a well 1,300 feet from the East line and 660 feet from the North line of said Section 28 and to dedicate the E/2 of Section 28, which is reasonably presumed to be productive of gas from the Wolfcamp through the Mississippian formations.

C. And for such other relief as may be just in the premises.

YATES PETROLEUM CORPORATION

By: 

Joel M. Carson

LOSEE, CARSON & DICKERSON, P.A.
P. O. Drawer 239
Artesia, New Mexico 88210

Attorneys for Applicant

BEFORE THE OIL CONSERVATION DIVISION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
YATES PETROLEUM CORPORATION FOR AN
UNORTHODOX GAS WELL LOCATION, EDDY
COUNTY, NEW MEXICO

CASE NO. 6510

APPLICATION

COMES NOW YATES PETROLEUM CORPORATION, by its attorneys,
and in support hereof, respectfully states:

1. Applicant is the operator of the Wolfcamp through
the Mississippian formations underlying:

Township 18 South, Range 27 East, N.M.P.M.

Section 28: E/2

and proposes to drill its Rio Pecos Federal "KO" No. 1 Well at a
point located 1,300 feet from the East line and 660 feet from the
North line of said Section 28.

2. The applicant seeks an exception to the well loca-
tion requirements of Rule 104-C.2(a) of the Oil Conservation
Division to permit the drilling of the well at the above men-
tioned unorthodox location to a depth sufficient to adequately
test the Wolfcamp through the Mississippian formations.

3. A standard 320-acre gas proration unit comprising
the E/2 of said Section 28 should be dedicated to such well or
to such lesser portion thereof as is reasonably shown to be
reasonably productive of gas.

4. The approval of this application will afford
applicant the opportunity to produce its just and equitable

share of gas, will prevent economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

WHEREFORE, applicant prays:

A. That this application be set for hearing before an examiner and that notice of said hearing be given as required by law.

B. That upon hearing the Division enter its order granting applicant permission to drill a well 1,300 feet from the East line and 660 feet from the North line of said Section 28 and to dedicate the E/2 of Section 28, which is reasonably presumed to be productive of gas from the Wolfcamp through the Mississippian formations.

C. And for such other relief as may be just in the premises.

YATES PETROLEUM CORPORATION

By: 

Joel M. Carson

LOSEE, CARSON & DICKERSON, P.A.
P. O. Drawer 239
Artesia, New Mexico 88210

Attorneys for Applicant

DRAFT

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 6510

ORDER NO. R- 5982

APPLICATION OF YATES PETROLEUM CORPORATION

FOR AN UNORTHODOX GAS WELL LOCATION,

EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on March 28, 19 79, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of 19 79, 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, Yates Petroleum Corporation, for its Rio Pecos Federal "KO" Well No. 1 to be located seeks approval of an unorthodox gas well location/ 660

feet from the North line and 1300 feet from the

East line of Section 28, Township 18 South

Range 27 East, NMPM, to test Wolfcamp through Mississippian formations, Eddy

County, New Mexico.

(3) That the E/2 of said Section 28 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That no offset operator objected to the proposed unorthodox location.

-2-

Case No. _____

Order No. R- _____

(6) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That an unorthodox gas well location for ~~the~~ Wolfcamp through Mississippian (the Yates Petroleum Corporation Rio Pecos Federal "KO" formations is hereby approved for a well to be located at a point Well No. 1, to be located 660 feet from the North line and 1300 feet from the East line of Section 28, Township 18 South, Range 27 East NNPM, PMA, Eddy County, New Mexico.

(2) That the E/2 of said Section 28 shall be dedicated to the above-described well.

(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 designated.