

CASE NO.

6511

APPLICATION,
Transcripts,
Small Exhibits,

ETC.

1 STATE OF NEW MEXICO
2 ENERGY AND MINERALS DEPARTMENT
3 OIL CONSERVATION DIVISION
4 State Land Office Building
5 Santa Fe, New Mexico
6 28 March 1979

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Yates Petroleum Corpor-) CASE
10 ation for a dual completion and downhole) 6511
11 commingling, Eddy County, New Mexico.)
12)
13)

14 BEFORE: Richard L. Stamets

15 TRANSCRIPT OF HEARING

16 A P P E A R A N C E S

17 For the Oil Conservation Lynn Teschendorf, Esq.
18 Division: Legal Counsel for the Division
19 For the Applicant: Joel Carson, Esq.
20 LOSEE, CARSON & DICKERSON P.A.
21 Artesia, New Mexico 88201
22
23
24
25

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (505) 471-2412
Santa Fe, New Mexico 87501

1 I N D E X
2

3 EDDIE MAHFOOD

4 Direct Examination by Mr. Carson 4
5 Cross Examination by Mr. Stamets 11
6
7
8
9
10

11 E X H I B I T S
12

13 Applicant Exhibit One, Map 6
14 Applicant Exhibit Two, Sketch 6
15 Applicant Exhibit Three, Production History 8
16 Applicant Exhibit Four, Logs 9
17 Applicant Exhibit Five, Bottom Hole Pressures 9
18
19 A - Strawn
20 B - Upper Morrow
21 C - Lower Morrow
22
23
24
25

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

1 MR. STAMETS: Call next Case 6511.

2 MS. TESCHENDORF: Case 6511. Application
3 of Yates Petroleum Corporation for dual completion and
4 downhole commingling, Eddy County, New Mexico.

5 MR. CARSON: Mr. Examiner, my name is Joel
6 Carson, Losee, Carson and Dickerson, P. A., Artesia, New
7 Mexico. I have one witness, Mr. Eddie Mahfood.

8 MR. STAMETS: He will please stand and be
9 sworn.

10
11 (Witness sworn.)

12
13 EDDIE MAHFOOD

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

16
17 DIRECT EXAMINATION

18 BY MR. CARSON:

19 Q. Mr. Mahfood, would you state your name,
20 please?

21 A. Eddie Mahfood.

22 Q. And by whom are you employed, Mr. Mahfood?

23 A. Yates Petroleum, Artesia, New Mexico.

24 Q. And in what capacity?

25 A. Chief Engineer.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

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

1 MR. CARSON: Mr. Examiner, before I begin
2 to interrogate Mr. Mahfood, let me make a preliminary re-
3 mark that the Yates management asked us to make, and that
4 is the purpose of this -- one of the purposes of this ap-
5 plication is to insure that the production from the lower
6 Morrow, as shown on one of our exhibits here, is not con-
7 fused with the production from upper Morrow or the Strawn,
8 because of the Yates' belief that the upper Morrow and the
9 Strawn are perhaps new reservoirs, and applications for
10 those determinations, I am told, have been filed, but we
11 want to make sure that until those determinations have been
12 made, even though this -- we are in hopes that this appli-
13 cation will be granted, it's not our intention to produce
14 the upper Morrow or the Strawn, for reasons previously
15 stated.

16 MR. STAMETS: So you're not in a rush for
17 this order.

18 MR. CARSON: Well, as the Examiner knows,
19 we had applied -- this well is being produced from the
20 lower Morrow. The upper Morrow and Strawn are presently
21 being killed, and we have done this with the understanding
22 from the Commission that we would make this application
23 and proceed with it all the way.

24 MR. STAMETS: What effect does it have if
25 we don't recognize the difference between the lower Morrow

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (505) 71-2462
Santa Fe, New Mexico 87501

1 and the upper Morrow? For pool purposes?

2 MR. CARSON: For pool purposes? I don't
3 know that it necessarily makes any difference because I
4 take it there'll have to be some proof that these are in
5 fact two separate pays.

6 MR. STAMETS: I think we'll be loathe to
7 create two separate Morrow Pools.

8 A. I don't think so, Mr. Examiner.

9 MR. STAMETS: Off the record.

10 (There followed a discussion
11 off the record.)

12 MR. STAMETS: You may proceed.

13 MR. CARSON: Okay. I was just about to ask
14 you, Mr. Examiner, if Mr. Mahfood's qualifications were
15 acceptable.

16 MR. STAMETS: The witness is considered
17 qualified.

18 Q. (Mr. Carson continuing.) Mr. Mahfood, would
19 you state a little more formally what the purpose of this
20 application is?

21 A. Yates Petroleum is asking for dual comple-
22 tion of this well and for downhole commingling of the upper
23 Morrow and Strawn in the annulus, the lower Morrow in the
24 tubing.

25 Q. And the well is the Tom Brown GO No. 1,

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2010 Plaza Blanca (505) 471-2442
Santa Fe, New Mexico 87501

1 located in Unit C of Section 22, 17, 26.

2 A. That is correct.

3 Q. Is that correct, Mr. Mahfood?

4 A. That is correct.

5 Q. I refer you to Applicant's Exhibit Number
6 One and ask you to identify that.

7 A. That's an ownership map showing the loca-
8 tion of the Tom Brown and the dedicated acreage.

9 Q. Okay, now I refer you to Applicant's Exhibit
10 Number Two and ask you to identify that exhibit and explain
11 what it shows.

12 A. It's a diagrammatic sketch of the proposed
13 dual completion and downhole commingling. We show two sets
14 of perforations, the Strawn at 8,064 to 70; the upper Mor-
15 row at 8,398 to 8402, and the lower Morrow at 8504 to 8512.
16 There is one packer in the well between the two Morrow zones.

17 Q. Mr. Mahfood, what is the -- you have pro-
18 duced the lower Morrow, have you not?

19 A. Yes. We have produced both the lower and
20 upper Morrow together for awhile, before we had this ques-
21 tion concerning --

22 Q. What is your production history of the lower
23 Morrow?

24 A. Okay, I have one other exhibit here that
25 shows --

1 Q Well, leave that to me.

2 A Okay. The lower Morrow has -- was initially
3 potentialized for 2.8 -- let's see, I have it on here. For
4 2.7-million, I believe, and later we opened up the upper
5 Morrow and it potentialized for 1.15-million, and we put the
6 two together and produced them for some time.

7 Q Now are the upper Morrow and the Strawn
8 presently being produced?

9 A No. At the present time only the lower
10 Morrow is produced.

11 Q What is the status of those two upper zones?

12 A They are shut in in the annulus with water -
13 and the annulus full of water.

14 There is no pressure or vacuum on the back
15 side.

16 MR. STAMETS: The annulus is full of water?

17 A KCL water.

18 MR. STAMETS: And it's perforated?

19 A It's perforated.

20 MR. STAMETS: Okay.

21 A The Strawn completion is a marginal com-
22 pletion with 350 Mcf per day. Last month we tested -- iso-
23 lated the upper Morrow and tested it separately and it blew
24 down to practically zero. We found it charged initially
25 and presumably charged from the lower Morrow and in an hour

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

1 and a half it blew down to almost zero. We shut it in for
2 two days or something like that, and we had a shut-in pres-
3 sure of around 1100 pounds. We opened it up and blew it
4 again and in a very short time, sometime between 30 minutes
5 and an hour and a half it blew down to zero again. We put
6 it on line shortly thereafter and it didn't -- it didn't
7 register anything on the sales line.

8 Q Mr. Mahfood, let me refer you to Applicant's
9 Exhibit Number Three and ask you to explain that exhibit.

10 A Exhibit Three is the production history of
11 the Tom Brown GO No. 1.

12 The upper and the lower Morrow were together
13 since 1977. We had two months of what we call the peanut
14 gas sale; then a two-month shut-in period; then we went
15 into two-month emergency sale.

16 So apart from these two months of sale,
17 the first sale began in April of '78.

18 I see just a very gradual decline in the
19 production curve and in the tubing pressure until February
20 when we shut the well in and separated the two zones to-
21 gether -- separated the two zones, the two Morrow zones
22 one from another.

23 The lower Morrow has a shut-in pressure
24 pretty near 2400 pounds. We put it back on the line and
25 at the time when I stopped this curve, which was about the

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

1 middle of March, we were producing in the neighborhood of
2 a million a day, a million -- almost 1200 a day, and tubing
3 pressure about 1000 pounds.

4 Q. Mr. Mahfood, I refer you to Applicant's Ex-
5 hibit Number Four and ask you to identify that and explain
6 it.

7 A. Exhibit Four is a blowdown of the electric
8 logs, a CNLFDC log on the left, and a dual lateral log on
9 the right.

10 The color orange denotes the pay zones.
11 The yellow and orange color of the separation of the RXL
12 curve from the DLL curves.

13 Q. I now refer you to Applicant's Exhibit
14 Number Five and ask you to explain that.

15 A. Exhibit Five are the bottom hole pressures
16 taken just recently in the Tom Brown.

17 Five-A is the shut-in pressure from the
18 Strawn, which shows a bottom hole pressure at set of
19 perforations of 2947.

20 That will be essentially virgin pressure
21 for that depth.

22 Five-B was taken on February 15 and that
23 was in the upper Morrow. It shows a bottom hole pressure
24 of 1980. Now this was right after we isolated the two zones
25 and we conclude that at this time the upper Morrow was charged

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (505) 771-7462
Santa Fe, New Mexico 87501

1 up.

2 When we blew it down in an hour and a half
3 and shut it back in for two days it built to 1100 pounds, only,
4 and since that it's even less than that.

5 Q. Now I refer you to Applicant's Five-C.

6 A. Five-C is the bottom hole pressure of the
7 lower Morrow. This was taken on February 27th, showing a
8 tubing pressure of 2235, bottom hole pressure at center of
9 perforations, of 2826.

10 Q. Does this well produce any liquids, Mr.
11 Mahfood?

12 A. Yes. This well does produce quite a bit of
13 liquids, as shown in Exhibit Number Three in black. It
14 produces approximately 8000 a day oil, condensate.

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

18 A. Yes, sir, they were.

19 MR. CARSON: I'd like to move admission of
20 these exhibits, Mr. Examiner.

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

23 Q. Mr. Mahfood, if this application is granted,
24 how do you propose to allocate the production from these
25 various formations?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (505) 471-2402
Santa Fe, New Mexico 87501

1 A. That's going to be very difficult because
2 it appears that the upper Morrow is already depleted. I
3 don't believe I could allow it more than one percent for
4 future recovery.

5 Q. Mr. Mahfood, in your professional opinion
6 is this -- the granting of this application be in accordance
7 with sound engineering practice, would it prevent waste, and
8 otherwise protect correlative rights?

9 A. Yes, I believe it would.

10 MR. CARSON: I have no further questions of
11 this witness, Mr. Examiner.

13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q. Mr. Mahfood, looking at Exhibit Number Three
16 it appears as though the gas production declined after you
17 separated the lower Morrow from the upper Morrow.

18 A. Yes, sir, I can't explain that unless there
19 was some damage done by reworking the well.

20 Q. Well, is it possible that the lower Morrow
21 actually was contributing some production and that's what's
22 been lost?

23 A. You said lower Morrow, you mean --

24 Q. I mean the upper Morrow, yes.

25 A. The information we gathered from our test

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (605) 471-2462
Santa Fe, New Mexico 87501

1 denies that, so at this point I don't know how to answer
2 that question.

3 Q. Mr. Mahfood, is there any engineering reason
4 why the upper Morrow and the lower Morrow should be completed
5 separately in this well?

6 A. Engineeringwise they could be -- they could
7 be completed together like they have been for years. The
8 problem is we need some determination from FERC or from
9 this department whether the two zones are new gas or if it's
10 permissible to produce new gas with old gas.

11 MR. STAMETS: Okay, let's go off the record
12 a second.

13 (There followed a discussion
14 off the record.)

15 Q. (Mr. Stamets continuing.) Does the Strawn
16 zone make any liquids?

17 A. I doubt it very much. We produced -- like
18 I said, it potentialled for 350 Mcf a day and normally if
19 it was going to make liquids, it would probably take several
20 days before it showed anything. In the time we tested it,
21 it showed no liquids.

22 MR. STAMETS: Any other questions of the
23 witness? He may be excused.

24 Anything further in this case? The case
25 will be taken under advisement.

(Hearing concluded.)

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
8020 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

1
2
3 REPORTER'S CERTIFICATE
4

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

12
13
14
15
16
17
18
19
20
21
22
23
24
25

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

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. 6511
heard by me on 3-28-1979
Daniel L. Shantz
Oil Conservation Division

1 STATE OF NEW MEXICO
2 ENERGY AND MINERALS DEPARTMENT
3 OIL CONSERVATION DIVISION
4 State Land Office Building
5 Santa Fe, New Mexico
6 28 March 1979

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Yates Petroleum Corpor-) CASE
10 ation for a dual completion and downhole) 6511
11 commingling, Eddy County, New Mexico.)
12

13 BEFORE: Richard L. Stamets

14 TRANSCRIPT OF HEARING

15 A P P E A R A N C E S

16 For the Oil Conservation Lynn Teschendorf, Esq.
17 Division: Legal Counsel for the Division
18 State Land Office Building
19 Santa Fe, New Mexico 87503

20 For the Applicant: Joel Carson, Esq.
21 LOSEE, CARSON & DICKERSON P.A.
22 Artesia, New Mexico 88201
23
24
25

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (605) 471-2462
Santa Fe, New Mexico 87501

I N D E X

1 EDDIE MAFFOOD

2 Direct Examination by Mr. Carson

4

5 Cross Examination by Mr. Stamets

11

E X H I B I T S

13 Applicant Exhibit One, Map

6

14 Applicant Exhibit Two, Sketch

6

15 Applicant Exhibit Three, Production History

8

16 Applicant Exhibit Four, Logs

9

17 Applicant Exhibit Five, Bottom Hole Pressures

9

18 A - Strawn

19 B - Upper Morrow

20 C - Lower Morrow

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 2020 Plaza Blanca (601) 471-2442
 Santa Fe, New Mexico 87501

1 MR. STAMETS: Call next Case 6511.

2 MS. TESCHENDORF: Case 6511. Application
3 of Yates Petroleum Corporation for dual completion and
4 downhole commingling, Eddy County, New Mexico.

5 MR. CARSON: Mr. Examiner, my name is Joel
6 Carson, Losee, Carson and Dickerson, P. A., Artesia, New
7 Mexico. I have one witness, Mr. Eddie Mahfood.

8 MR. STAMETS: He will please stand and be
9 sworn.

10 (Witness sworn.)

11 EDDIE MAHFOOD

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

14 DIRECT EXAMINATION

15 BY MR. CARSON:

16 Q. Mr. Mahfood, would you state your name,
17 please?

18 A. Eddie Mahfood.

19 Q. And by whom are you employed, Mr. Mahfood?

20 A. Yates Petroleum, Artesia, New Mexico.

21 Q. And in what capacity?

22 A. Chief Engineer.

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza, Bldg. #615 (615) 471-2462
Santa Fe, New Mexico 87501

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (505) 471-2442
Santa Fe, New Mexico 87501

1 MR. CARSON: Mr. Examiner, before I begin
2 to interrogate Mr. Mahfood, let me make a preliminary re-
3 mark that the Yates management asked us to make, and that
4 is the purpose of this -- one of the purposes of this ap-
5 plication is to insure that the production from the lower
6 Morrow, as shown on one of our exhibits here, is not con-
7 fused with the production from upper Morrow or the Strawn,
8 because of the Yates' belief that the upper Morrow and the
9 Strawn are perhaps new reservoirs, and applications for
10 those determinations, I am told, have been filed, but we
11 want to make sure that until those determinations have been
12 made, even though this --- we are in hopes that this appli-
13 cation will be granted, it's not our intention to produce
14 the upper Morrow or the Strawn, for reasons previously
15 stated.

16 MR. STAMETS: So you're not in a rush for
17 this order.

18 MR. CARSON: Well, as the Examiner knows,
19 we had applied -- this well is being produced from the
20 lower Morrow. The upper Morrow and Strawn are presently
21 being killed, and we have done this with the understanding
22 from the Commission that we would make this application
23 and proceed with it all the way.

24 MR. STAMETS: What effect does it have if
25 we don't recognize the difference between the lower Morrow

1 and the upper Morrow? For pool purposes?

2 MR. CARSON: For pool purposes? I don't
 3 know that it necessarily makes any difference because I
 4 take it there'll have to be some proof that these are in
 5 fact two separate pays.

6 MR. STAMETS: I think we'll be loathe to
 7 create two separate Morrow Pools.

8 A. I don't think so, Mr. Examiner.

9 MR. STAMETS: Off the record.

10 (There followed a discussion
 11 off the record.)

12 MR. STAMETS: You may proceed.

13 MR. CARSON: Okay. I was just about to ask
 14 you, Mr. Examiner, if Mr. Mahfood's qualifications were
 15 acceptable.

16 MR. STAMETS: The witness is considered
 17 qualified.

18 Q. (Mr. Carson continuing.) Mr. Mahfood, would
 19 you state a little more formally what the purpose of this
 20 application is?

21 A. Yates Petroleum is asking for dual comple-
 22 tion of this well and for downhole commingling of the upper
 23 Morrow and Strawn in the annulus, the lower Morrow in the
 24 tubing.

25 Q. And the well is the Tom Brown GO No. 1,

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 3630 Plaza Blanca (505) 471-2462
 Santa Fe, New Mexico 87501

1 located in Unit C of Section 22, 17, 26.

2 A. That is correct.

3 Q. Is that correct, Mr. Mahfood?

4 A. That is correct.

5 Q. I refer you to Applicant's Exhibit Number
6 One and ask you to identify that.

7 A. That's an ownership map showing the loca-
8 tion of the Tom Brown and the dedicated acreage.

9 Q. Okay, now I refer you to Applicant's Exhibit
10 Number Two and ask you to identify that exhibit and explain
11 what it shows.

12 A. It's a diagrammatic sketch of the proposed
13 dual completion and downhole commingling. We show two sets
14 of perforations, the Strawn at 8,064 to 70; the upper Mor-
15 row at 8,398 to 8402, and the lower Morrow at 8504 to 8512.
16 There is one packer in the well between the two Morrow zones.

17 Q. Mr. Mahfood, what is the --- you have pro-
18 duced the lower Morrow, have you not?

19 A. Yes. We have produced both the lower and
20 upper Morrow together for awhile, before we had this ques-
21 tion concerning --

22 Q. What is your production history of the lower
23 Morrow?

24 A. Okay, I have one other exhibit here that
25 shows --

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3010 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

1 Q Well, leave that to me.

2 A Okay. The lower Morrow has -- was initially
3 potentialed for 2.8 -- let's see, I have it on here. For
4 2.7-million, I believe, and later we opened up the upper
5 Morrow and it potentialed for 1.15-million, and we put the
6 two together and produced them for some time.

7 Q Now are the upper Morrow and the Strawn
8 presently being produced?

9 A No. At the present time only the lower
10 Morrow is produced.

11 Q What is the status of those two upper zones?

12 A They are shut in in the annulus with water --
13 and the annulus full of water.

14 There is no pressure or vacuum on the back
15 side.

16 MR. STAMETS: The annulus is full of water?

17 A KCL water.

18 MR. STAMETS: And it's perforated?

19 A It's perforated.

20 MR. STAMETS: Okay.

21 A The Strawn completion is a marginal com-
22 pletion with 350 Mcf per day. Last month we tested -- iso-
23 lated the upper Morrow and tested it separately and it blew
24 down to practically zero. We found it charged initially
25 and presumably charged from the lower Morrow and in an hour

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
303 Plaza Blanca (505) 471-5462
Santa Fe, New Mexico 87501

1 and a half it blew down to almost zero. We shut it in for
2 two days or something like that, and we had a shut-in pres-
3 sure of around 1100 pounds. We oponed it up and blew it
4 again and in a very short time, sometime between 30 minutes
5 and an hour and a half it blew down to zero again. We put
6 it on line shortly thereafter and it didn't --- it didn't
7 register anything on the sales line.

8 Q. Mr. Mahfood, let me refer you to Applicant's
9 Exhibit Number Three and ask you to explain that exhibit.

10 A. Exhibit Three is the production history of
11 the Tom Brown GO No. 1.

12 The upper and the lower Morrow were together
13 since 1977. We had two months of what we call the peanut
14 gas sale; then a two-month shut-in period; then we went
15 into two-month emergency sale.

16 So apart from these two months of sale,
17 the first sale began in April of '78.

18 We see just a very gradual decline in the
19 production curve and in the tubing pressure until February
20 when we shut the well in and separated the two zones to-
21 gether -- separated the two zones, the two Morrow zones
22 one from another.

23 The lower Morrow has a shut-in pressure
24 pretty near 2400 pounds. We put it back on the line and
25 at the time when I stopped this curve, which was about the

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

1 middle of March, we were producing in the neighborhood of
2 a million a day, a million --- almost 1200 a day, and tubing
3 pressure about 1000 pounds.

4 Q. Mr. Nahfood, I refer you to Applicant's Ex-
5 hibit Number Four and ask you to identify that and explain
6 it.

7 A. Exhibit Four is a blowdown of the electric
8 logs, a CNLFDC log on the left, and a dual lateral log on
9 the right.

10 The color orange denotes the pay zones.
11 The yellow and orange color of the separation of the RXL
12 curve from the DLL curves.

13 Q. I now refer you to Applicant's Exhibit
14 Number Five and ask you to explain that.

15 A. Exhibit Five are the bottom hole pressures
16 taken just recently in the Tom Brown.

17 Five-A is the shut-in pressure from the
18 Strawn, which shows a bottom hole pressure at set of
19 perforations of 2947.

20 That will be essentially virgin pressure
21 for that depth.

22 Five-B was taken on February 15 and that
23 was in the upper Morrow. It shows a bottom hole pressure
24 of 1980. Now this was right after we isolated the two zones
25 and we conclude that at this time the upper Morrow was charged

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

1 up.

2 When we blew it down in an hour and a half
3 and shut it back in for two days it built to 1100 pounds, only,
4 and since that it's even less than that.

5 Q. Now I refer you to Applicant's Five-C.

6 A. Five-C is the bottom hole pressure of the
7 lower Morrow. This was taken on February 27th, showing a
8 tubing pressure of 2235, bottom hole pressure at center of
9 perforations, of 2826.

10 Q. Does this well produce any liquids, Mr.
11 Mahfood?

12 A. Yes. This well does produce quite a bit of
13 liquids, as shown in Exhibit Number Three in black. It
14 produces approximately 8000 a day oil, condensate.

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

18 A. Yes, sir, they were.

19 MR. CARSON: I'd like to move admission of
20 these exhibits, Mr. Examiner.

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

23 Q. Mr. Mahfood, if this application is granted,
24 how do you propose to allocate the production from these
25 various formations?

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
820 Plaza Blanca (505) 712-1462
Santa Fe, New Mexico 87501

1 Q. That's going to be very difficult because
2 it appears that the upper Morrow is already depleted. I
3 don't believe I could allow it more than one percent for
4 future recovery.

5 Q. Mr. Mahfood, in your professional opinion
6 is this -- the granting of this application be in accordance
7 with sound engineering practice, would it prevent waste, and
8 otherwise protect correlative rights?

9 A. Yes, I believe it would.

10 MR. CARSON: I have no further questions of
11 this witness, Mr. Examiner.

13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q. Mr. Mahfood, looking at Exhibit Number Three,
16 it appears as though the gas production declined after you
17 separated the lower Morrow from the upper Morrow.

18 A. Yes, sir, I can't explain that unless there
19 was some damage done by reworking the well.

20 Q. Well, is it possible that the lower Morrow
21 actually was contributing some production and that's what's
22 been lost?

23 A. You said lower Morrow, you mean ---

24 Q. I mean the upper Morrow, yes.

25 A. The information we gathered from our test

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2024 Plaza Blanca (505) 471-4462
Santa Fe, New Mexico 87501

1 denies that, so at this point I don't know how to answer
2 that question.

3 Q. Mr. Mahfood, is there any engineering reason
4 why the upper Morrow and the lower Morrow should be completed
5 separately in this well?

6 A. Engineeringwise they could be -- they could
7 be completed together like they have been for years. The
8 problem is we need some determination from FERC or from
9 this department whether the two zones are new gas or if it's
10 permissible to produce new gas with old gas.

11 MR. STAMETS: Okay, let's go off the record
12 a second.

13 (There followed a discussion
14 off the record.)

15 Q. (Mr. Stamets continuing.) Does the Strawn
16 zone make any liquids?

17 A. I doubt it very much. We produced -- like
18 I said, it potentialized for 350 Mcf a day and normally if
19 it was going to make liquids, it would probably take several
20 days before it showed anything. In the time we tested it,
21 it showed no liquids.

22 MR. STAMETS: Any other questions of the
23 witness? He may be excused.

24 Anything further in this case? The case
25 will be taken under advisement.

(Hearing concluded.)

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
2020 Plaza Blanca (505) 471-2442
Santa Fe, New Mexico 87501

1
2
3 REPORTER'S CERTIFICATE
4

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

12
13
14
15
16
17
18
19
20
21
22
23
24
25
SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (505) 471-2462
Santa Fe, New Mexico 87501

Sally W. Boyd, C.S.R.

16
17
18
19
20
21
22
23
24
25
**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**



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

JERRY APODACA
GOVERNOR

NICK FRANKLIN
SECRETARY

POST OFFICE BOX 2038
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

April 9, 1979

Re: CASE NO. 6511
Mr. Joel Carson ORDER NO. R-5983
Lossee, Carson & Dickerson
Attorneys at Law
Post Office Box 239
Artesia, New Mexico 88210

Applicant:

Yates Petroleum Corporation

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC X
Artesia OCC X
Aztec OCC _____

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. 6511
Order No. R-5983

APPLICATION OF YATES PETROLEUM
CORPORATION FOR A DUAL COMPLETION,
AND DOWNHOLE COMMINGLING, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 o'clock 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 authority to complete its Tom Brown "GO" Com Well No. 1, located in Unit C of Section 22, Township 17 South, Range 26 East, NMPM, Eddy County, New Mexico, as a dual completion (conventional) 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.

(3) That the evidence presented established no sound engineering or geological reasons for dually completing and separately producing the Upper and Lower zones of the Morrow formation.

(4) That the evidence presented indicated that the proposed method of production may result in lower ultimate recovery of gas from the Morrow formation.

-2-

Case No. 6511
Order No. R-5983

(5) That to prevent waste the subject application should be denied.

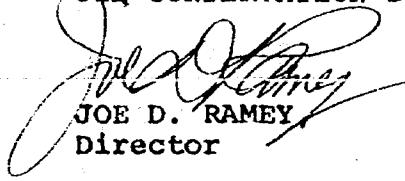
IT IS THEREFORE ORDERED:

(1) That the application of Yates Petroleum Corporation, to complete its Tom Brown "GO" Com Well No. 1, located in Unit C of Section 22, Township 17 South, Range 26 East, NMPM, Kennedy Farms Field, Eddy County, New Mexico, as a dual completion (conventional) 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 is hereby denied.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

dr/

Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling

Elevation: 3339 GR = 3356 KB
 Spudded: 12-10-76
 Init Compl: 3-9-77 (Morrow)
 Temp Compl: 12-27-77 (Strawn)
 Dual Compl:

Top of San Andres - 975'

Base of Artesian Water - 1300'

Top of L. Canyon @ 7424 KB

Top of Strawn @ 7861 KB

Strawn Completion

IPF - 230' on 1/4 Ck = 350 mcfpd
 1-13-78 SIBHP: 2942

Top of Atolca @ 8226 KB

Top of Morrow @ 8386 KB

Upper Morrow Completion

IPF: 1-15-79 SIBHP: 1988 Est. 50-100 mcfpd

Lower Morrow Completion

IPF: 240' on 1/2 Ck = 1.5 mcfpd
 2-27-79 SIBHP: 2826

Bifurcated Chester @ 8641 KB

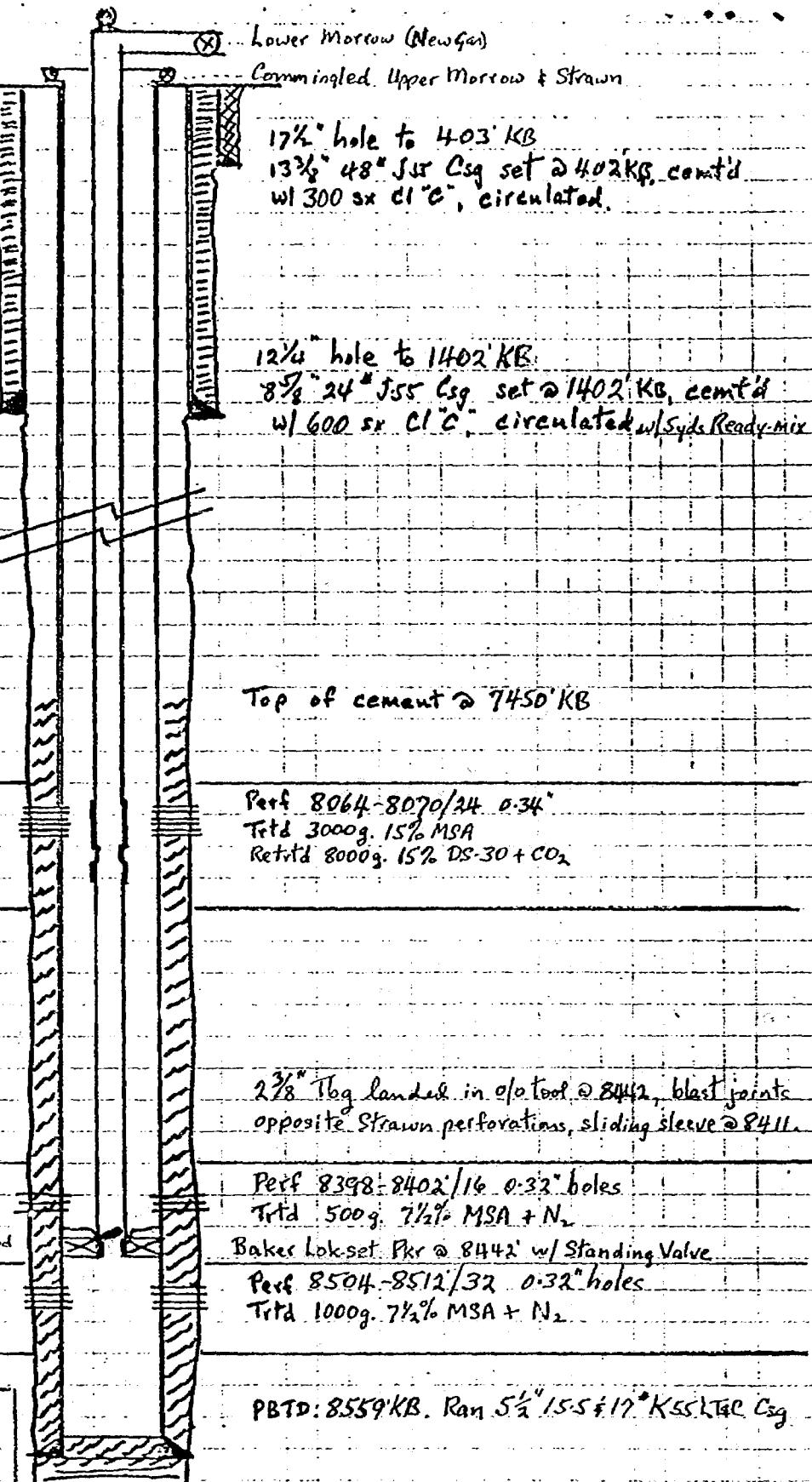
OIL CONSERVATION DIVISION

EXHIBIT NO. 2

CASE NO. 6511

Submitted by Yates

Hearing Date 3-22-79



Black-Oil
Red-Gas

TOM BROWN CO.
Yates Pet. Corp.

1977

Black-Oil
Red-Gas
Green-Tag Press.

TOM BROWN CO.
Yates Pet. Corp.

1977

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

1995

1996

1997

1998

1999

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

2027

2028

2029

2030

2031

2032

2033

2034

2035

2036

2037

2038

2039

2040

2041

2042

2043

2044

2045

2046

2047

2048

2049

2050

2051

2052

2053

2054

2055

2056

2057

2058

2059

2060

2061

2062

2063

2064

2065

2066

2067

2068

2069

2070

2071

2072

2073

2074

2075

2076

2077

2078

2079

2080

2081

2082

2083

2084

2085

2086

2087

2088

2089

2090

2091

2092

2093

2094

2095

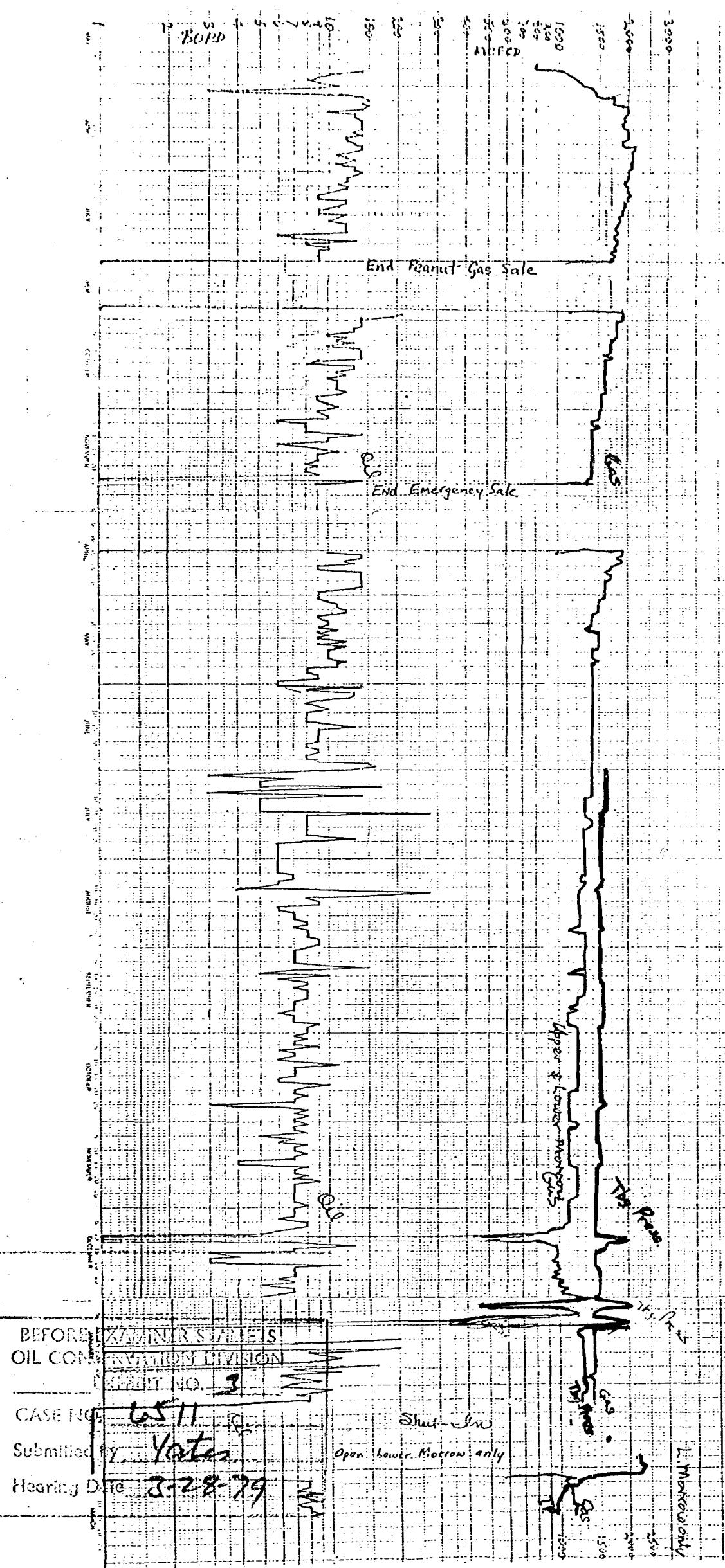
2096

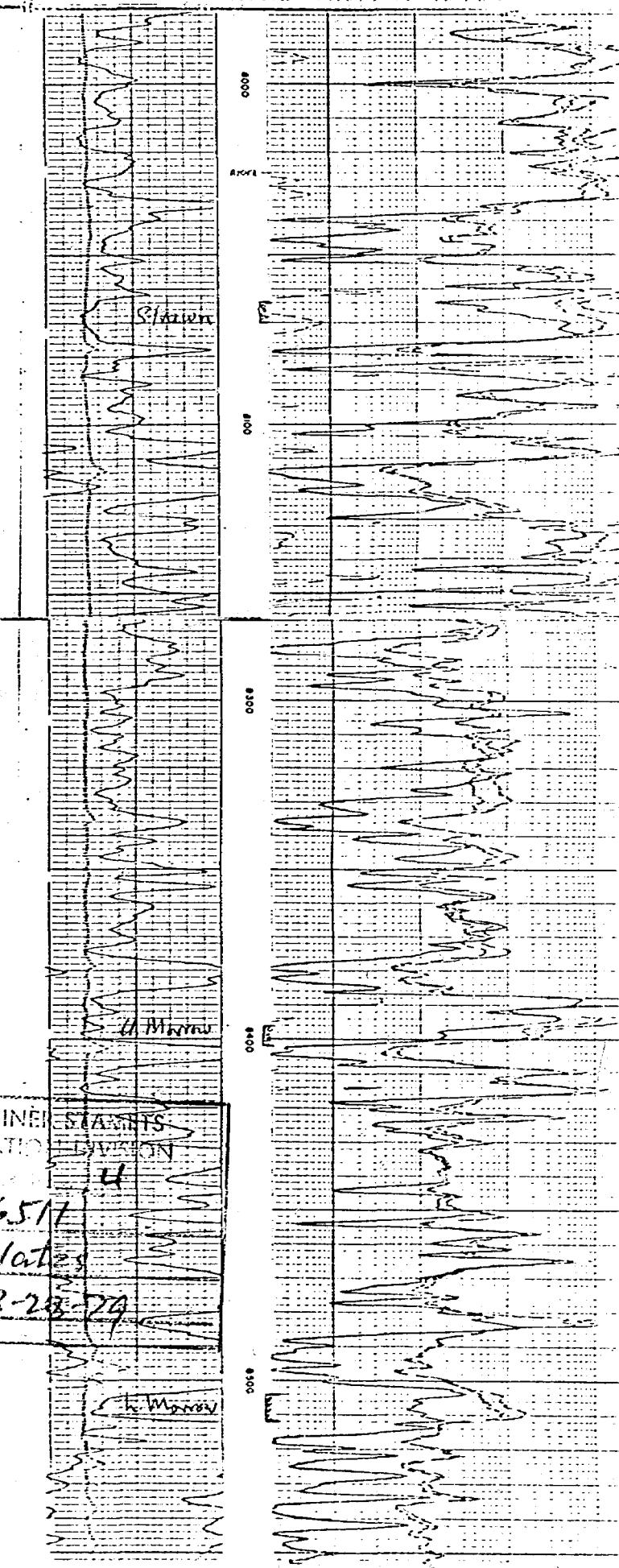
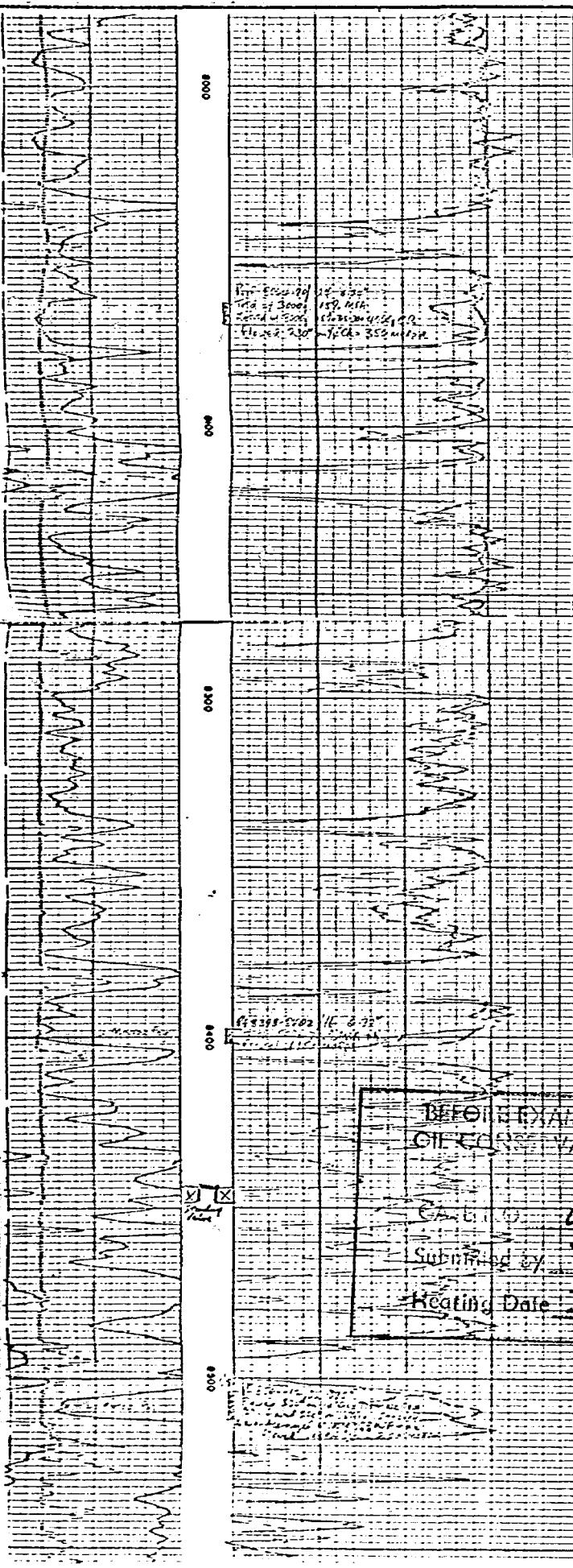
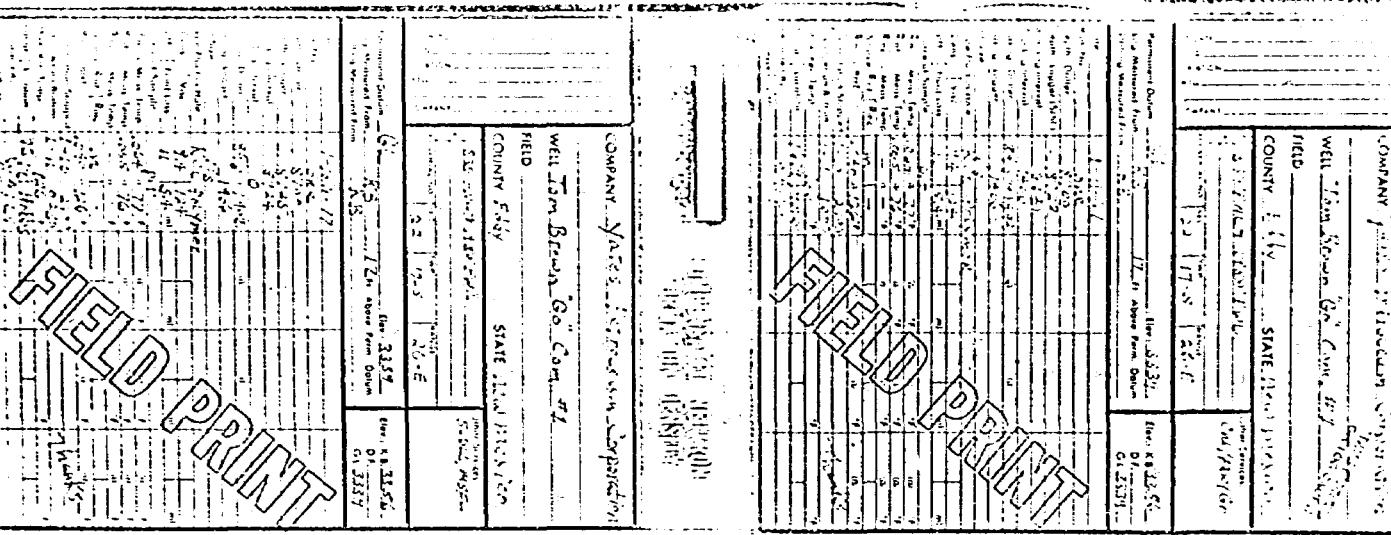
2097

2098

2099

20100



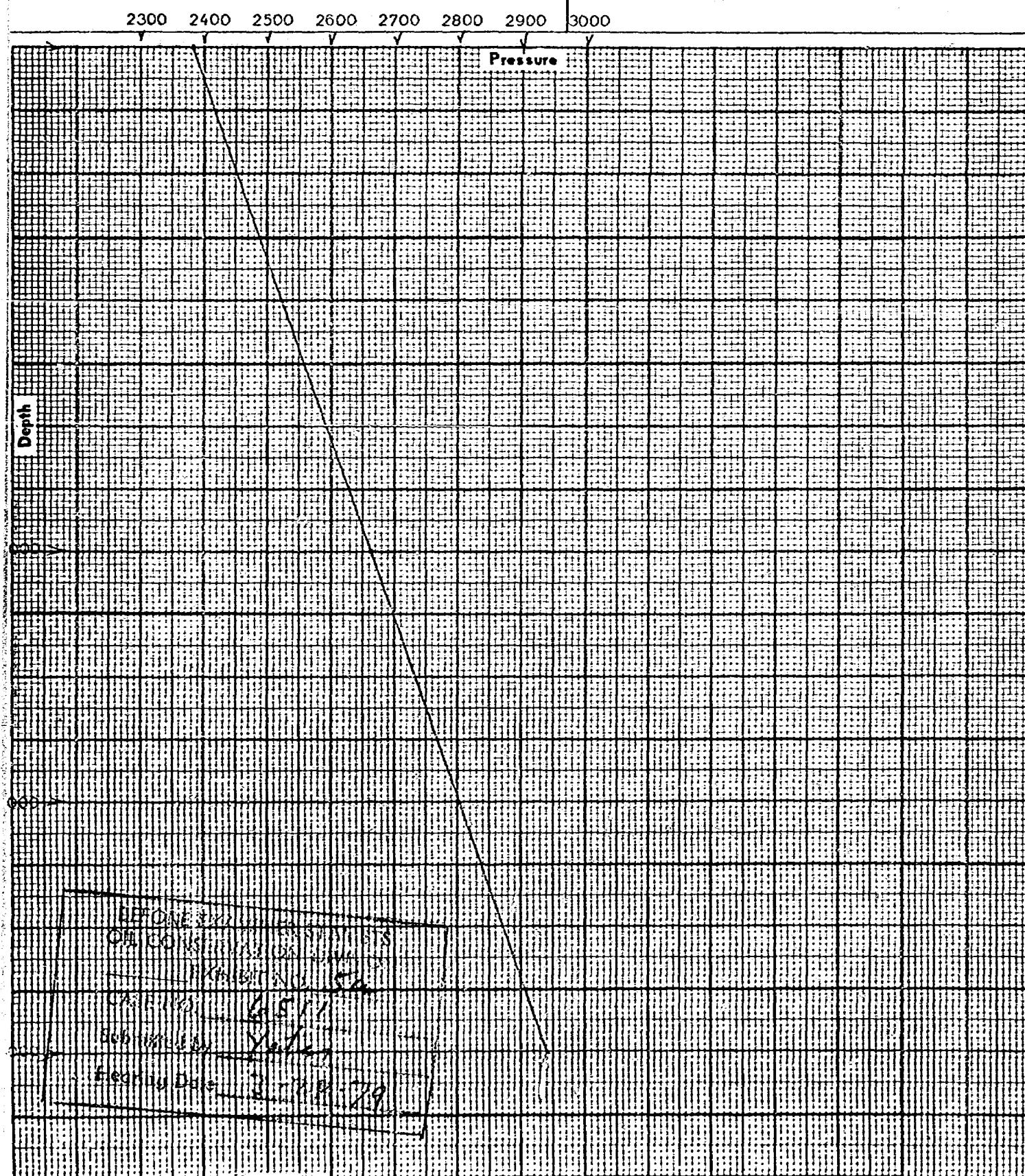


Bennett Wire Line Service
305 McArthur Ave. Ph. (505) 746 - 3281
Artesia, New Mexico - 88210

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR YATES PET. CORP.
LEASE Tom Brown Com.
WELL NO. 1
FIELD
DATE 1/13/78 TIME
STATUS Shut-in TEST DEPTH 8,000 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 2382 Lbs. BHP CHANGE
ELEV. FLUID TOP None
DATUM WATER TOP "
TEMP 143° RUN BY Bennett
CLOCK NO. GAUGE NO.
ELEMENT NO.

| DEPTH | PRESSURE | GRADIENT Lbs./100 Ft. |
|--------|-----------|--------------------------|
| 0 Ft. | 2382 Lbs. | |
| 4000 " | 2662 " | 7.0 |
| 6000 " | 2802 " | 7.0 |
| 8000 " | 2942 " | 7.0 |
| 8067 | 2947 | |





BE. NETT WIRE LINE SERVICE

P.O. BOX 787

ARTESIA, NEW MEXICO 88210

Phone 746-3281

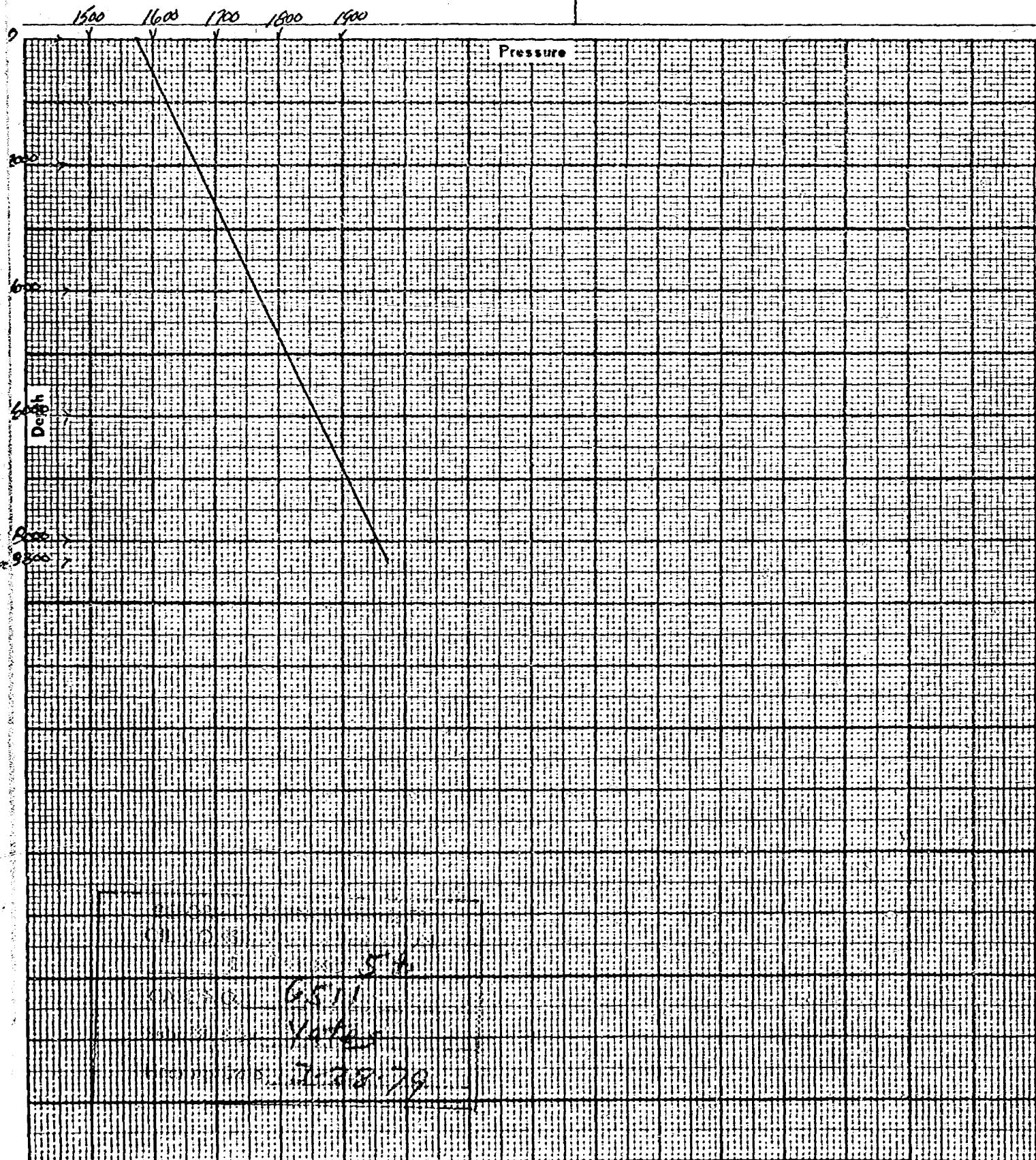


BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR Yates Petroleum Corp.
LEASE Tom Brown "GO" Comm.
WELL NO. 1
FIELD _____
DATE 2/15/79 TIME 9:00 A.M.
STATUS Shut-in TEST DEPTH 8300 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 1576 BHP CHANGE
ELEV. FLUID TOP None
DATUM WATER TOP
TEMP 142° RUN BY Billy Joe
CLOCK NO. GAUGE NO.
ELEMENT NO. 43798

| DEPTH | PRESSURE | GRADIENT lbs./100 Ft. |
|--------|-----------|--------------------------|
| 0 Ft. | 1576 lbs. | |
| 2000 " | 1644 " | 3.4 |
| 4000 " | 1744 " | 5.0 |
| 6000 " | 1840 " | 4.8 |
| 8000 " | 1947 " | 5.3 |
| 8300 " | 1972 " | 8.3 |

CP 8410 1980



BE. NETT WIRE LINE SE. VICE

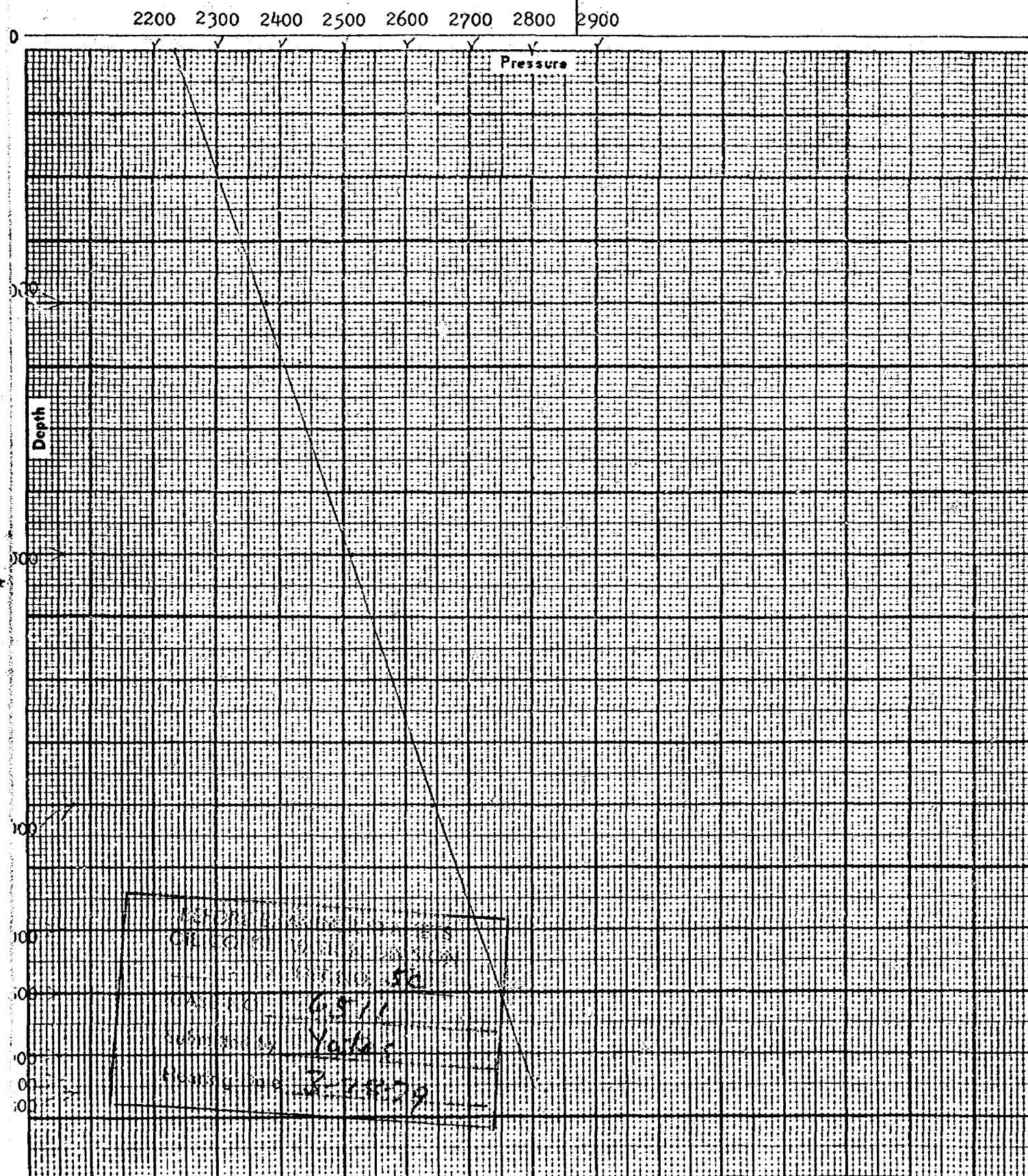
P. O. BOX 787
ARTESIA, NEW MEXICO 88210
Phone 746-3281

BOTTOM HOLE PRESSURE SURVEY REPORT

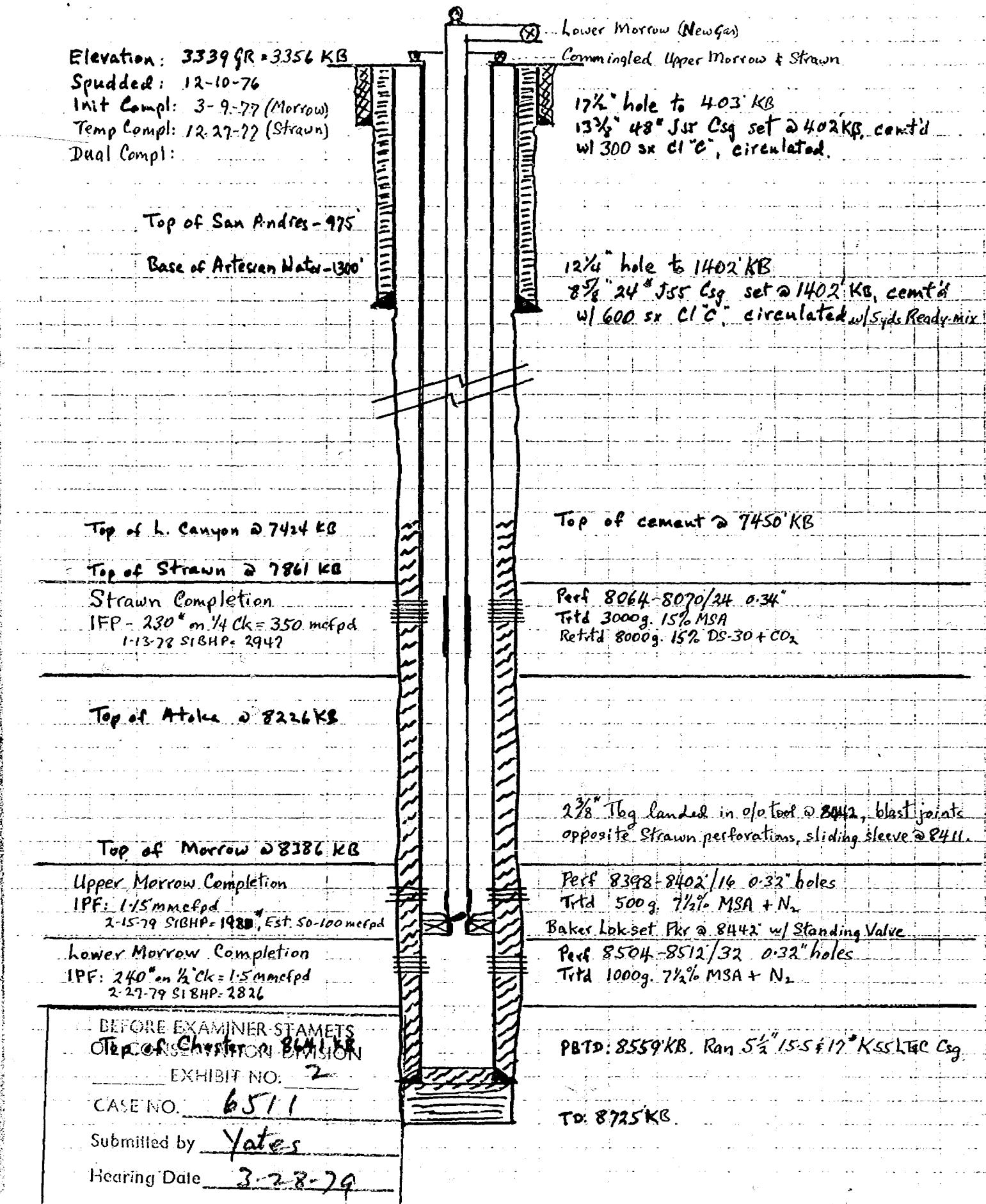
OPERATOR YATES PET. CORP.
LEASE Tom Brown
WELL NO. 1
FIELD
DATE 2/27 /79 TIME 3:00 PM.
STATUS Shut-in TEST DEPTH 8300 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 2235 Lbs. BHP CHANGE
ELEV. FLUID TOP None
DATUM WATER TOP
TEMP RUN BY
CLOCK NO. GAUGE NO.
ELEMENT NO.

| DEPTH | PRESSURE | GRADIENT |
|--------|-----------|----------|
| 0 Ft. | 2235 Lbs. | |
| 2000 " | 2365 " | 6.5 |
| 4000 " | 2507 " | 7.1 |
| 6000 " | 2646 " | 7.0 |
| 7000 " | 2719 " | 7.3 |
| 7500 " | 2753 " | 8.8 |
| 8000 " | 2790 " | 7.4 |
| 8200 " | 2804 " | 7.0 |
| 8300 " | 2811 " | 7.0 |

CP 8508 2826



YPC - Tom Brown GO Com. No. 1, C-22-175-26E, Kennedy Farms, Eddy Co., N.Mex.
Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling



Black-Oil
Red-Gas

ZON BROWN &
Yates Pet. Corp.

1977

1978

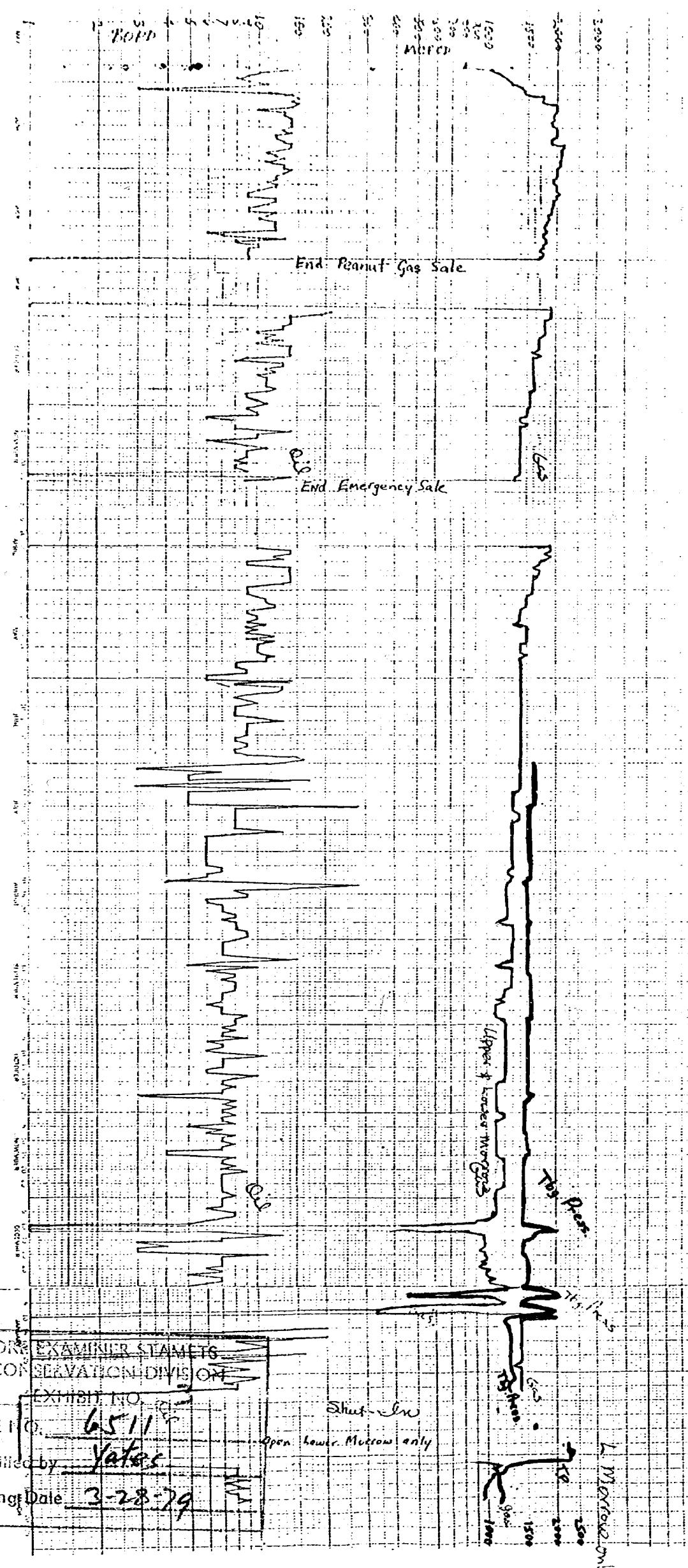
1979

Black-Oil
Red-Gas
Green-Tog Press

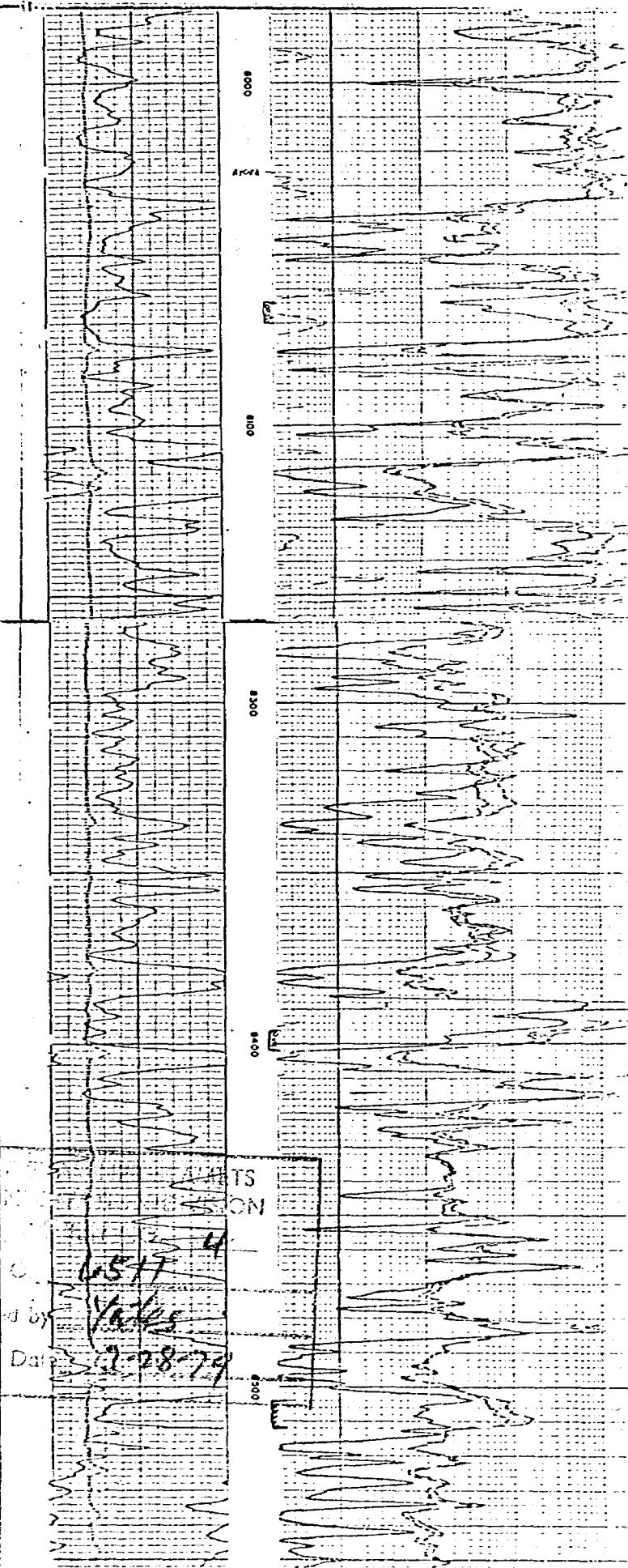
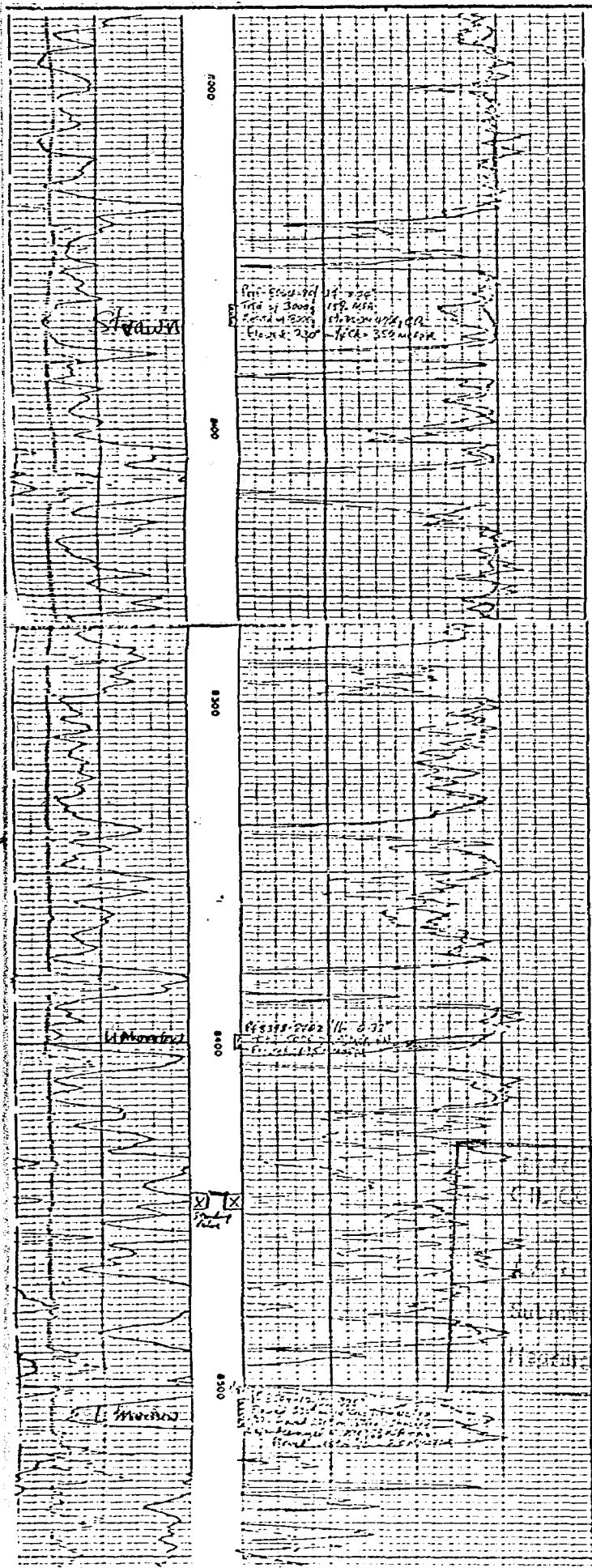
ZON BROWN &
Yates Pet. Corp.

1978
1979

11 Month
Month



FIELD PRINT



Bennett Wire Line Service
305 McArthur Ave. Ph. (505) 746-3281
Artesia, New Mexico - 88210

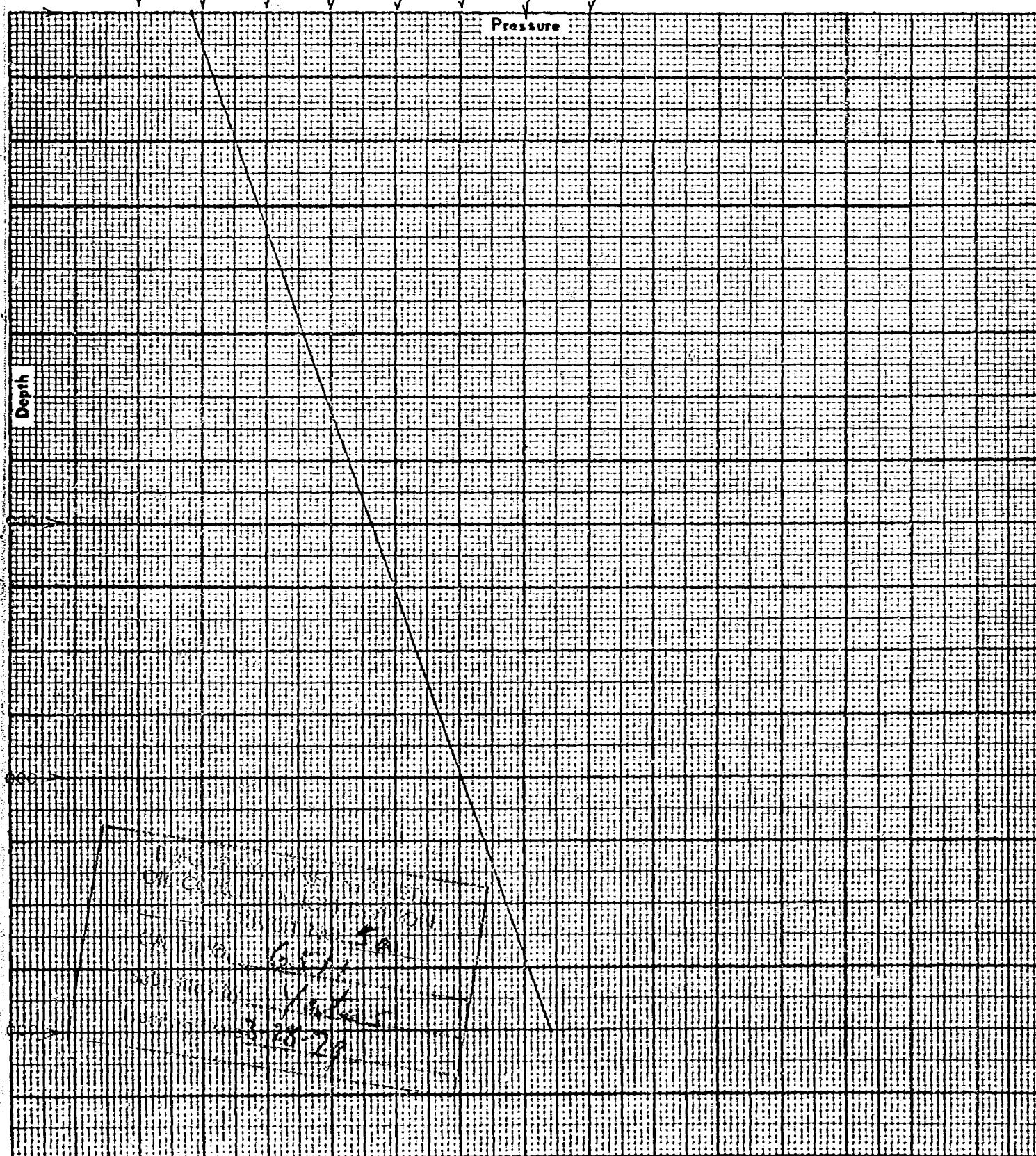
BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR YATES PET. CORP.
LEASE Tom Brown Com.
WELL NO. 1
FIELD
DATE 1/13/78 TIME _____

STATUS Shut-in TEST DEPTH 8,000 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 2382 Lbs. BHP CHANGE
ELEV. FLUID TOP None
DATUM 143' WATER TOP "
TEMP RUN BY Bennett
CLOCK NO. GAUGE NO.
ELEMENT NO.

| DEPTH | PRESSURE | GRADIENT Lbs./100 Ft. |
|---------|-----------|--------------------------|
| 0 Ft. | 2382 Lbs. | |
| 4000 " | 2662 " | 7.0 |
| 6000 " | 2802 " | 7.0 |
| 8000 " | 2942 " | 7.0 |
| (P 806) | 2947 | |

2300 2400 2500 2600 2700 2800 2900 3000





BE. NETT WIRE LINE SERVICE

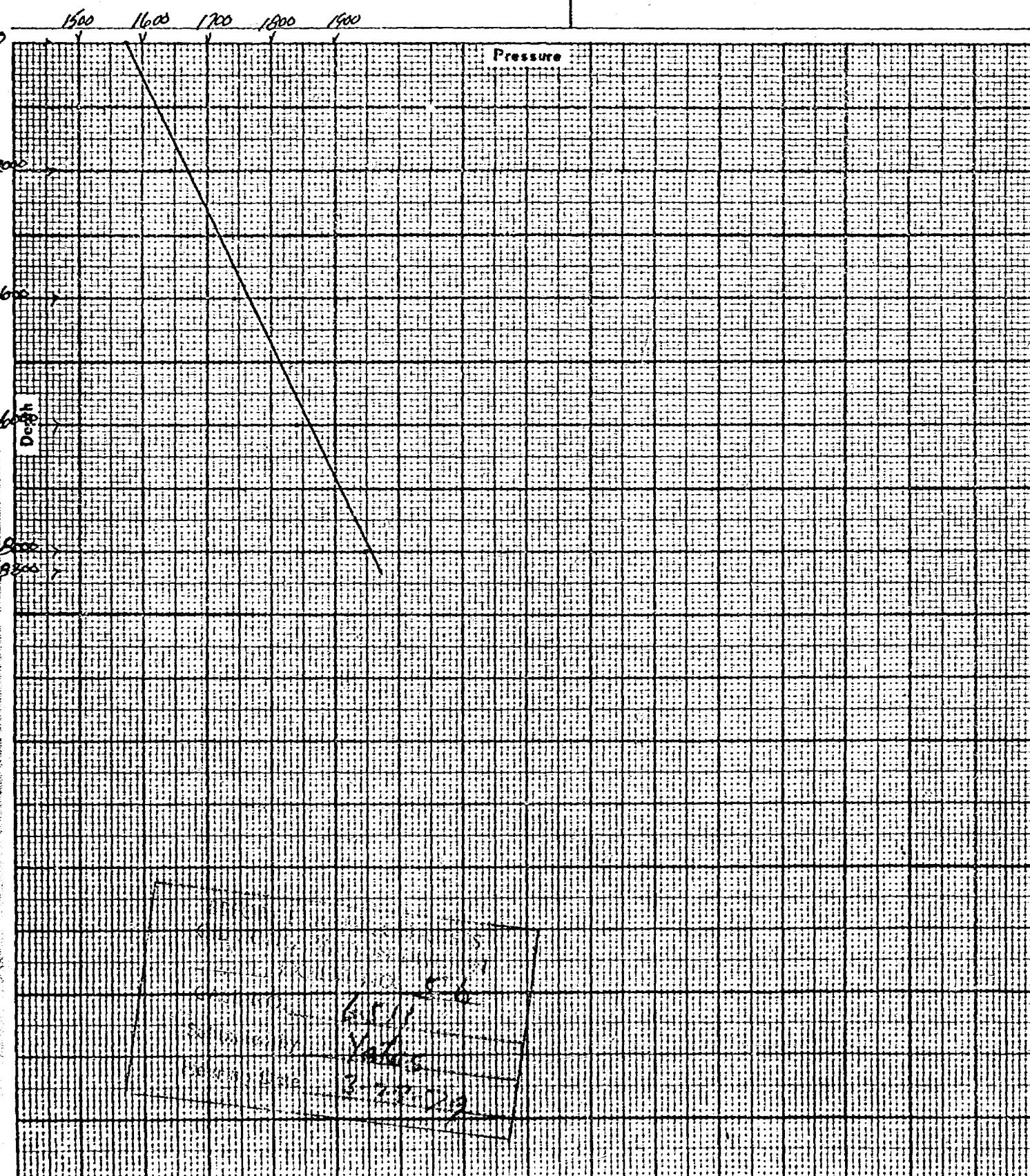
P. O. BOX 787
ARTESIA, NEW MEXICO 88210
Phone 746-3281



BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR Yates Petroleum Corp.
LEASE Tom Brown "GO" Comm.
WELL NO. 1
FIELD
DATE 2/15/79 TIME 9:00 A.M.
STATUS Shut-in TEST DEPTH 8300 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 1576 BHP CHANGE
ELEV. FLUID TOP None
DATUM 142° WATER TOP
TEMP RUN BY Billy Joe
CLOCK NO. GAUGE NO.
ELEMENT NO. 43798

| DEPTH | PRESSURE | GRADIENT Lbs. /100 Ft. |
|--------|-----------|---------------------------|
| 0 Ft. | 1576 Lbs. | |
| 2000 " | 1644 " | 3.4 |
| 4000 " | 1744 " | 5.0 |
| 6000 " | 1840 " | 4.8 |
| 8000 " | 1947 " | 5.3 |
| 8300 " | 1972 " | 8.3 |
| CP | 8400 | 1980 |





BE. NETT WIRE LINE SERVICE
P. O. BOX 787
ARTESIA, NEW MEXICO 88210
Phone 746-3281

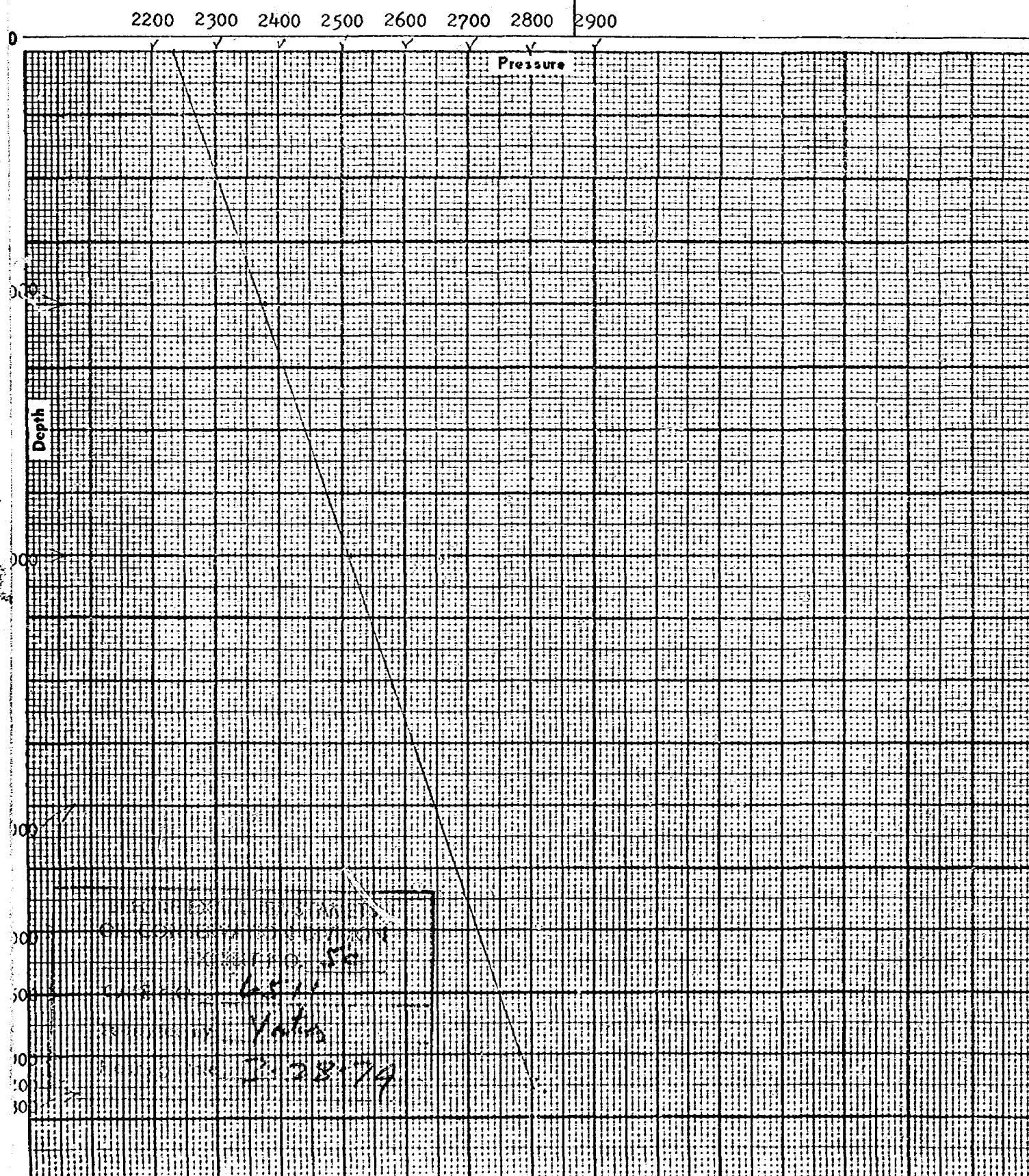


BOTTOM HOLE PRESSURE SURVEY REPORT

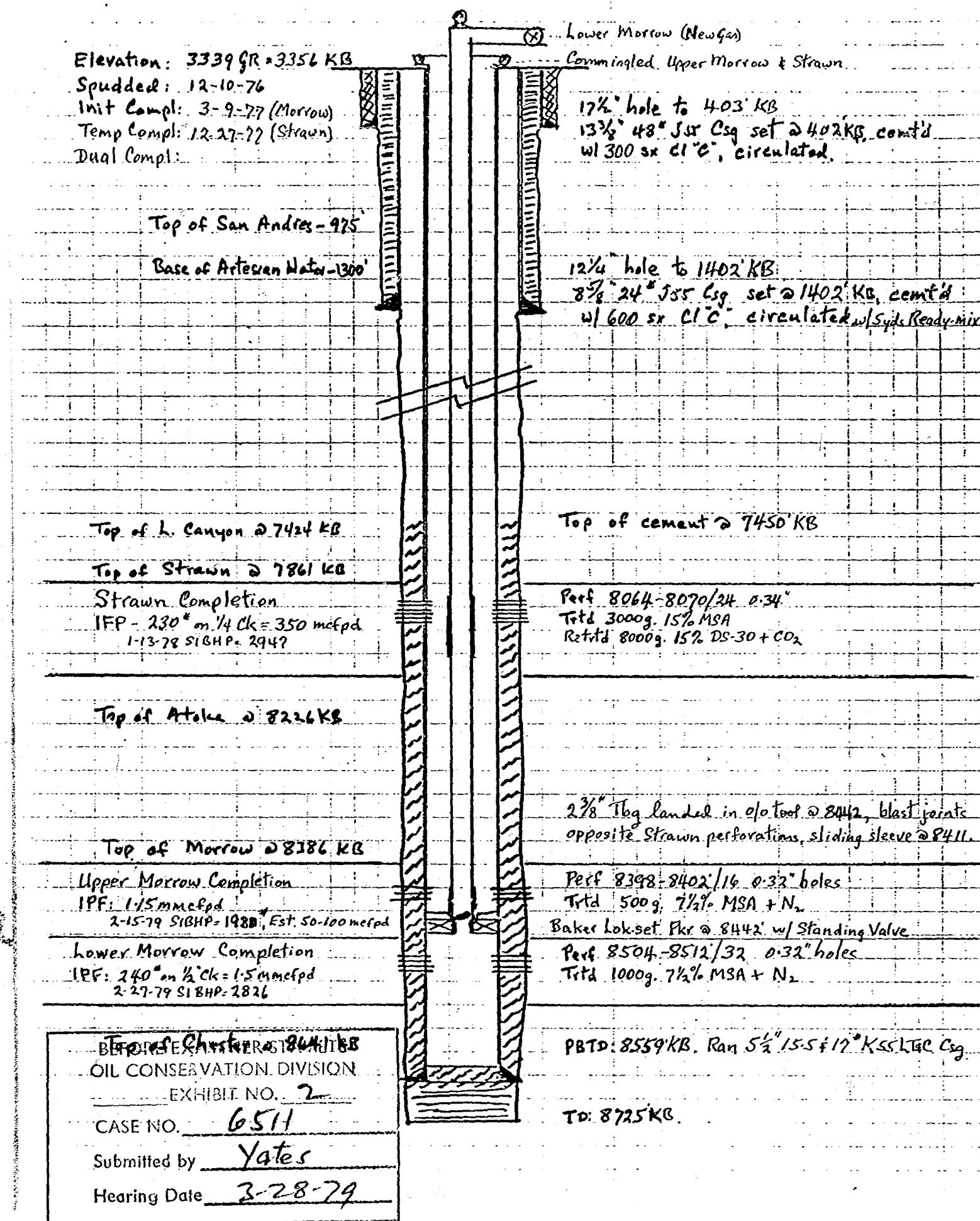
OPERATOR YATES PET. CORP.
LEASE Tom Brown
WELL NO. 1
FIELD _____
DATE 2/27 /29 TIME 3:00 PM.
STATUS Shut-in TEST DEPTH 8300 ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 2235 lbs. BHP CHANGE
ELEV. FLUID TOP None
DATUM WATER TOP
TEMP RUN BY
CLOCK NO. GAUGE NO.
ELEMENT NO.

| DEPTH | PRESSURE | GRADIENT |
|--------|-----------|----------|
| 0 ft. | 2235 Lbs. | |
| 2000 " | 2365 " | 6.5 |
| 4000 " | 2507 " | 7.1 |
| 6000 " | 2646 " | 7.0 |
| 7000 " | 2719 " | 7.3 |
| 7500 " | 2753 " | 8.8 |
| 8000 " | 2790 " | 7.4 |
| 8200 " | 2804 " | 7.0 |
| 8300 " | 2811 " | 7.0 |

CP 8508 2826



Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling



Black-Oil
Red-Gas

TOM BROWN CO.
Yates Pet. Corp.

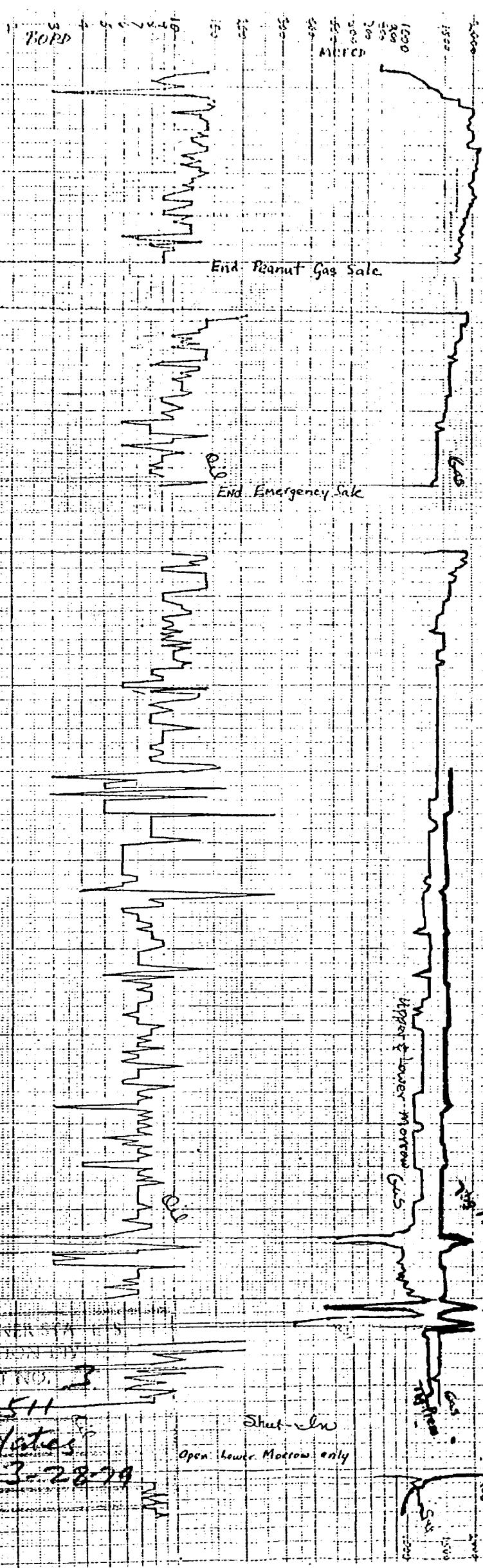
1977

1978

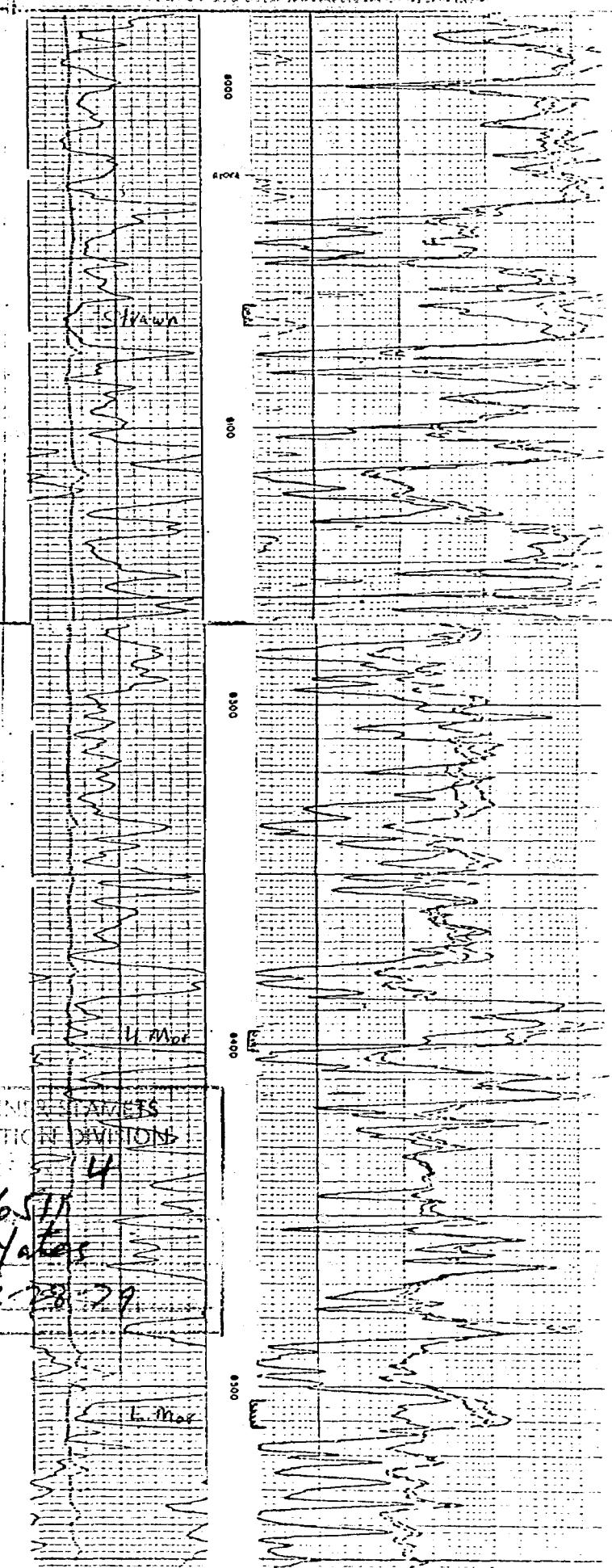
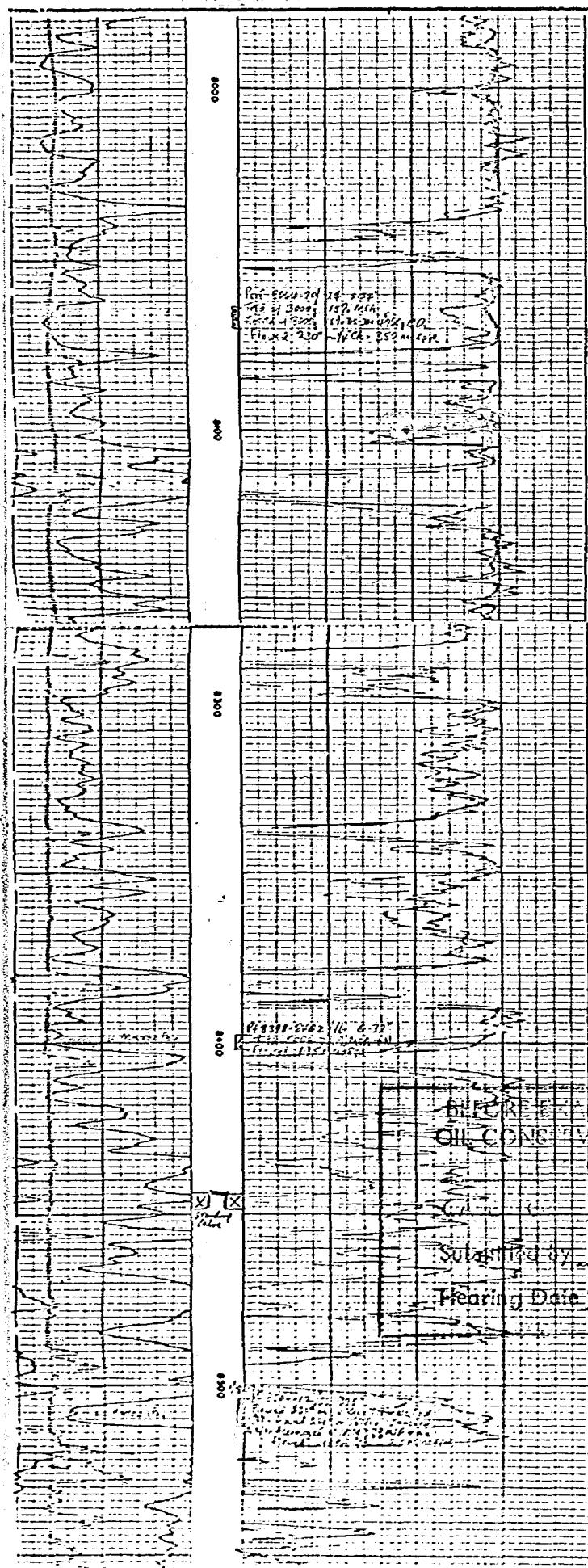
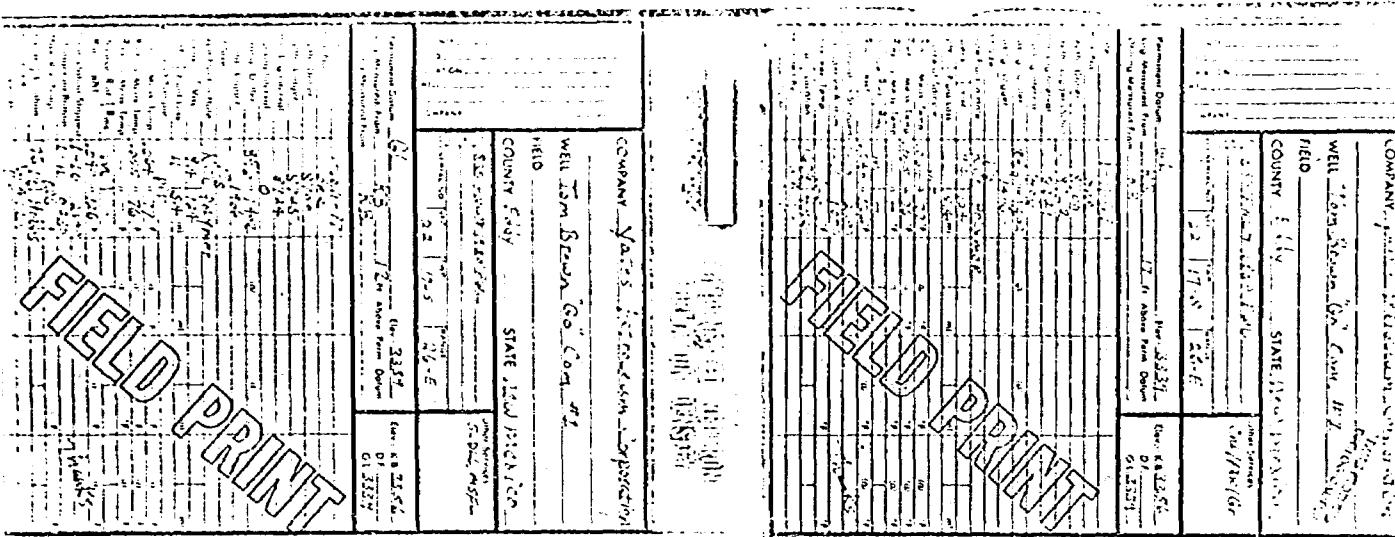
Black-Oil
Red-Gas
Green-The Press.

TOM BROWN CO.
Yates Pet. Corp.

1978
1979



| | |
|--------------------|--------------------|
| BEFORE OIL CON- | EXAMINER'S NAME |
| CASE NO. | EXHIBIT NO. |
| Submitted by | Yates |
| Hearing Date | 3-28-78 |

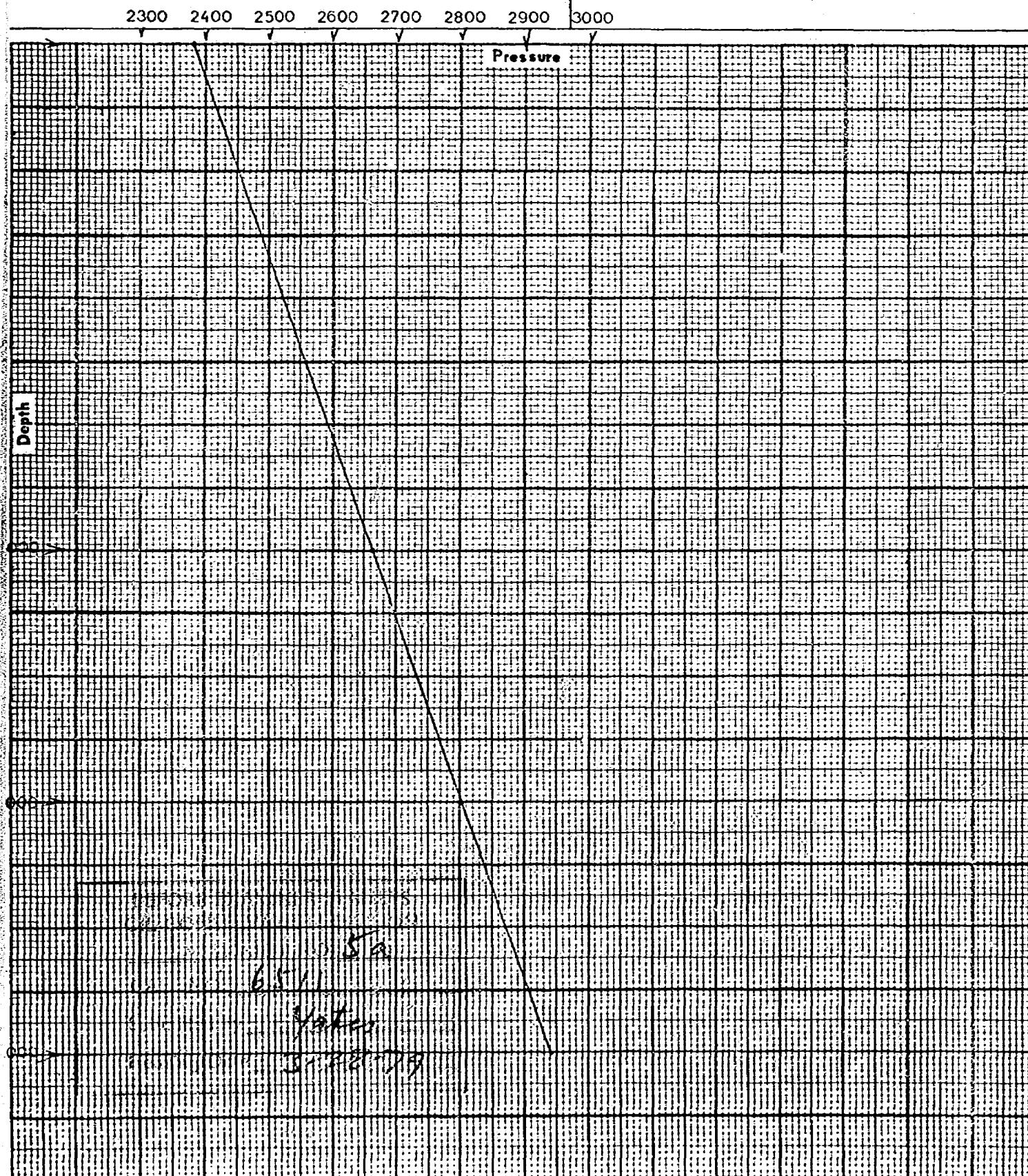


Bennett Wire Line Service
305 McArthur Ave. Ph. (505) 746 - 3281
Artesia, New Mexico 88210

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR YATES PET. CORP.
LEASE Tom Brown Com.
WELL NO. 1
FIELD
DATE 1/13/78 TIME
STATUS Shut-in TEST DEPTH 8,000 Ft.
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 2382 Lbs. BHP CHANGE
ELÈV. FLUID TOP None
DATUM WATER TOP "
TEMP. 143° RUN BY Bennett
CLOCK NO. GAUGE NO.
ELEMENT NO.

| DEPTH | PRESSURE | GRADIENT Lbs./100 Ft. |
|--------|-----------|--------------------------|
| 0 Ft. | 2382 Lbs. | |
| 4000 " | 2662 " | 7.0 |
| 6000 " | 2802 " | 7.0 |
| 8000 " | 2942 " | 7.0 |
| 8067 | 2947 | |



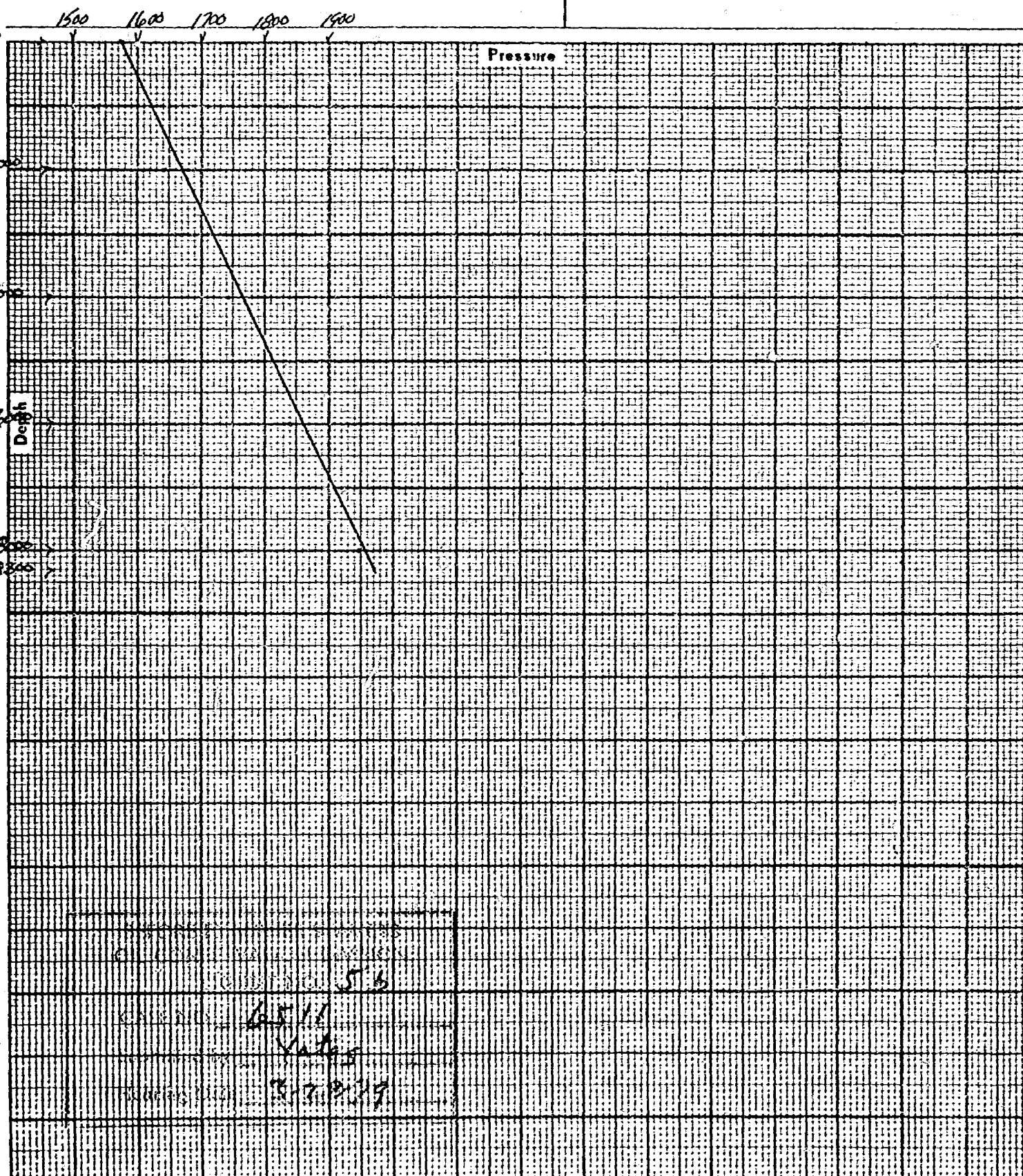
B.E. NETT WIRE LINE SERVICE

P.O. BOX 787
 ARTESIA, NEW MEXICO 88210
 Phone 746-3281

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR Yates Petroleum Corp.
 LEASE Tom Brown "GO" Comm.
 WELL NO. 1
 FIELD
 DATE 2/15/79 TIME 9:00 A.M.
 STATUS Shut-in TEST DEPTH 8300 Ft.
 TIME S.I. LAST TEST DATE
 CAS. PRES. BHP LAST TEST
 TUB. PRES. 1576 BHP CHANGE
 ELEV. FLUID TOP None
 DATUM WATER TOP
 TEMP 142° RUN BY Billy Joe
 CLOCK NO. GAUGE NO.
 ELEMENT NO. 43798

| DEPTH | PRESSURE | GRADIENT Lbs. /100 ft. |
|--------|-----------|---------------------------|
| 0 Ft. | 1576 Lbs. | |
| 2000 " | 1644 " | 3.4 |
| 4000 " | 1744 " | 5.0 |
| 6000 " | 1840 " | 4.8 |
| 8000 " | 1947 " | 5.3 |
| 8300 " | 1972 " | 8.3 |
| CP | 8416 | 1980 |





BE. NETT WIRE LINE SERVICE

P.O. BOX 787

ARTESIA, NEW MEXICO 88210

Phone 746-3281



BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR YATES PET. CORP.LEASE Tom BrownWELL NO. 1

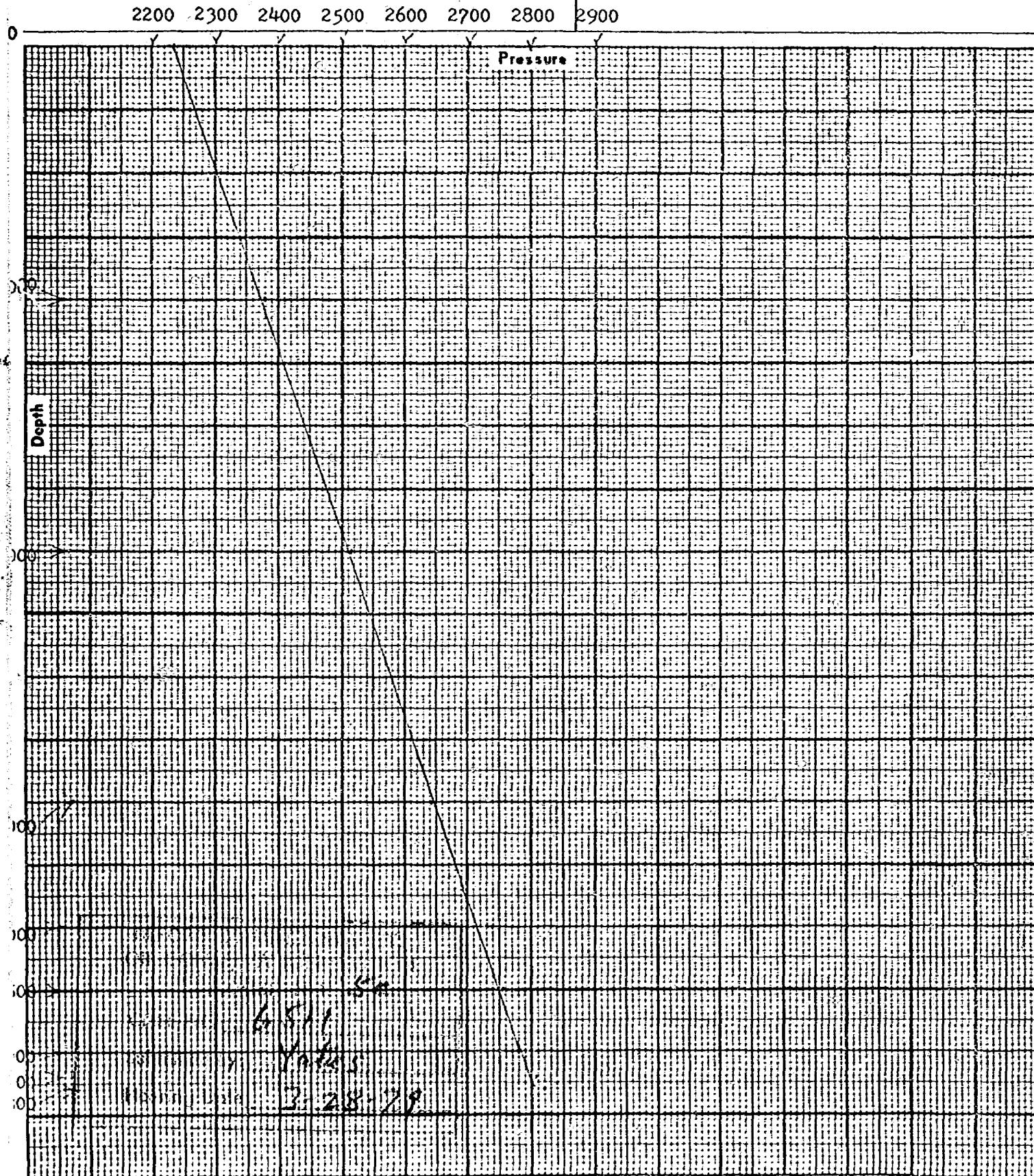
FIELD

DATE 2/22/79 TIME 3:00 PM.STATUS Shut-in TEST DEPTH 8300 Ft.TIME S.I. LAST TEST DATE CAS. PRES. BHP LAST TEST TUB. PRES. 2235 Lbs. BHP CHANGE ELEV. FLUID TOP NoneDATUM WATER TOP TEMP RUN BY CLOCK NO. GAUGE NO. ELEMENT NO.

DEPTH PRESSURE GRADIENT

| | | |
|--------|-----------|-----|
| 0 Ft. | 2235 Lbs. | |
| 2000 " | 2365 " | 6.5 |
| 4000 " | 2507 " | 7.1 |
| 6000 " | 2646 " | 7.0 |
| 7000 " | 2719 " | 7.3 |
| 7500 " | 2753 " | 8.8 |
| 8000 " | 2790 " | 7.4 |
| 8200 " | 2804 " | 7.0 |
| 8300 " | 2811 " | 7.0 |

CP 8508 2826



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 Depco 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 "K0" 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 "G0" 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 GQ 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. Applicaat, 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
CONSERVATION DIVISION
SANTA FE

AREA CODE 505
746-3528

5 March 1979

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

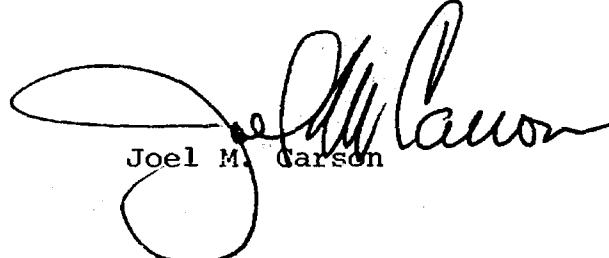
Dear Mr. Ramey:

Enclosed for filing, please find three copies of Application of Yates Petroleum Corporation for dual completion and downhole commingling in Eddy County, New Mexico.

We ask that this case be set for hearing and that you furnish us with a docket of said hearing.

Yours truly,

LOSEE, CARSON & DICKERSON, P.A.


Joel M. Carson

JMC:bjm
Enclosures

cc w/enclosure: 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 DUAL :
COMPLETION AND DOWNHOLE COMMINGLING, : CASE NO. 6511
EDDY COUNTY, NEW MEXICO :
:

APPLICATION

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

1. That applicant is the operator of the Pennsylvanian system underlying the N/2 of Section 22, Township 17 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, upon which it has drilled its Tom Brown "GO" Com. No. 1 Well. This well is located within the boundaries of the Kennedy Farms Pool.
2. That applicant proposes to dually complete and commingle the Upper Morrow and the Strawn in the annulus and to produce the Lower Morrow formation through the tubing.
3. That the perforations are as follows:

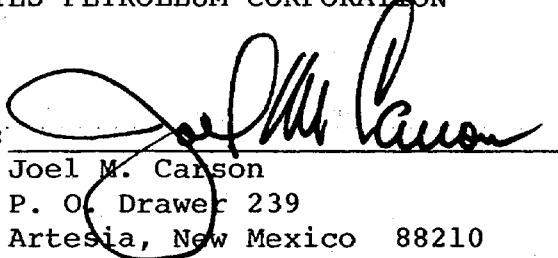
| | |
|---------------|--------------------|
| Strawn: | 8,064 - 8,070 Feet |
| Upper Morrow: | 8,398 - 8,402 Feet |
| Lower Morrow: | 8,504 - 8,512 Feet |

4. That a diagrammatic sketch of the proposed dual completion and commingling in accordance with Rule 112(a) of the Division Rules and Regulations is attached hereto; that the mechanics of the proposed dual completion is feasible in accordance with good conservation practice; 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 permission to applicant to dually complete and commingle as is set forth above its Tom Brown "GO" Com. No. 1 Well for the production of gas from the Pennsylvanian formation of the Kennedy Farms Pool,
- C. And for such other relief as may be just in the premises.

YATES PETROLEUM CORPORATION

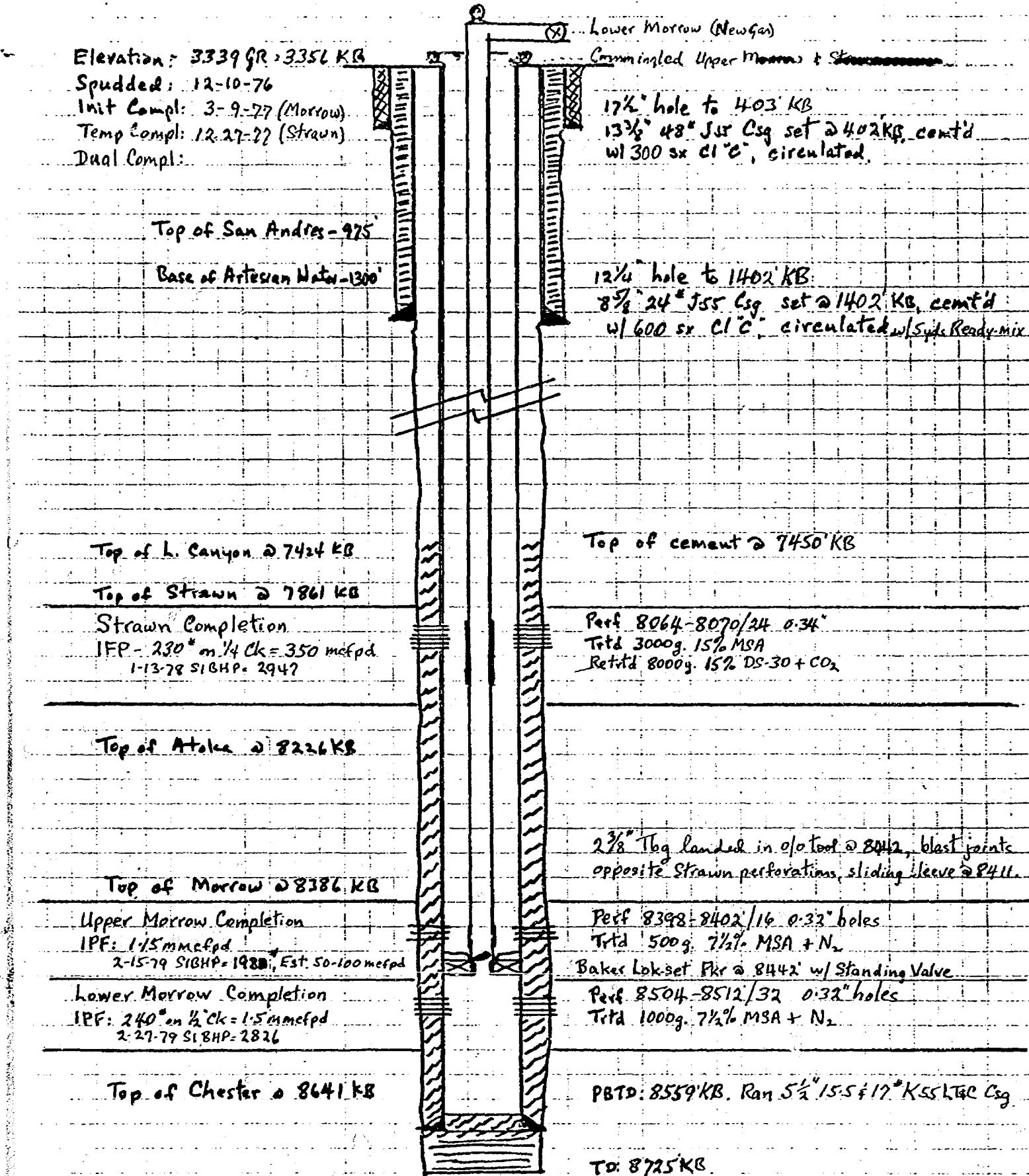
By: 

Joel M. Carson
P. O. Drawer 239
Artesia, New Mexico 88210

Attorney for Applicant

YPC - Tom Brown GO Com No. 1, C-22-175-26E, Kennedy Farms, Eddy Co., N.Mex.
Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling

Elevation: 3339 GR = 3356 KB
 Spudded: 12-10-76
 Init Compl: 3-9-77 (Morrow)
 Temp Compl: 12-27-77 (Strawn)
 Dual Compl:



BEFORE THE OIL CONSERVATION DIVISION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF :
YATES PETROLEUM CORPORATION FOR DUAL :
COMPLETION AND DOWNHOLE COMMINGLING, : CASE NO. 6511
EDDY COUNTY, NEW MEXICO :
:

APPLICATION

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

1. That applicant is the operator of the Pennsylvanian
system underlying the N/2 of Section 22, Township 17 South,
Range 26 East, N.M.P.M., Eddy County, New Mexico, upon which it
has drilled its Tom Brown "GO" Com. No. 1 Well. This well is
located within the boundaries of the Kennedy Farms Pool.

2. That applicant proposes to dually complete and
commingle the Upper Morrow and the Strawn in the annulus and to
produce the Lower Morrow formation through the tubing.

3. That the perforations are as follows:

Strawn: 8,064 ~ 8,070 Feet

Upper Morrow: 8,398 - 8,402 Feet

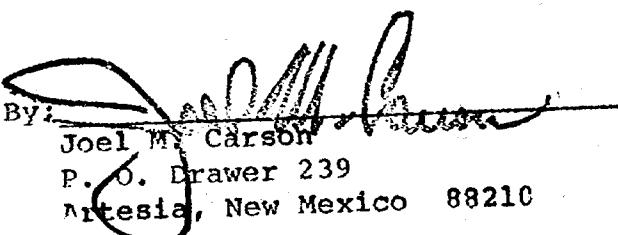
Lower Morrow: 8,504 - 8,512 Feet

4. That a diagrammatic sketch of the proposed dual
completion and commingling in accordance with Rule 112(a)
of the Division Rules and Regulations is attached hereto; that
the mechanics of the proposed dual completion is feasible in ac-
cordance with good conservation practice; 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 permission to applicant to dually complete and commingle as is set forth above its Tom Brown "GO" Com. No. 1 Well for the production of gas from the Pennsylvanian formation of the Kennedy Farms Pool.
- C. And for such other relief as may be just in the premises.

YATES PETROLEUM CORPORATION

By: 
Joel M. Carson
P. O. Drawer 239
Artesia, New Mexico 88210

Attorney for Applicant

YPC - Tom Brown GO Com No. 1, C-22-175-26E, Kennedy Farms, Eddy Co., N.Mex.
 Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling

Elevation: 3339 ft = 3356 KB
 Spudded: 12-10-76
 Init Compl: 3-9-77 (Morrow)
 Temp Compl: 12-27-77 (Strawn)
 Dual Compl:

Top of San Andres - 975'

Base of Artesian Water - 1300'

Top of L. Canyon @ 7424 KB

Top of Strawn @ 7861 KB

Strawn Completion

IPF = 230' on $\frac{1}{4}$ Ch = 350 mcfpd
 1-13-78 SIBHP = 294?

Top of Atoka @ 8226 KB

Top of Morrow @ 8386 KB

Upper Morrow Completion

IPF: 1.15 mcfpd
 2-15-79 SIBHP = 1920', Est. 50-100 mcfpd

Lower Morrow Completion

IPF: 1.40' on $\frac{1}{4}$ Ch = 1.5 mcfpd
 2-27-79 SIBHP = 2826

Top of Chester @ 8641 KB

(X) Lower Morrow (New Gas)

Commingled Upper Morrow & Strawn

17 $\frac{1}{2}$ " hole to 403' KB
 13 $\frac{3}{8}$ " 48° SSR Csg set @ 402 KB, com'd
 w/ 300 syp Cl "C", circulated.

12 $\frac{1}{4}$ " hole to 1402' KB

8 $\frac{1}{2}$ " 24° SSR Csg set @ 1402 KB, com'd
 w/ 600 syp Cl "C", circulated w/ Side Ready Mix

Top of cement @ 7450' KB

Perf 8064-8070/24. 0.34"

Ttd 3000g. 15% MSA
 Retrd 8000g. 15% DS-30 + CO₂

2 $\frac{3}{8}$ " Tbg landed in 0/0 tool @ 8442', blast joints
 opposite Strawn perforations, sliding sleeve @ 8411.

Perf 8398-8402/16 0.32" holes

Ttd 500g. 7 $\frac{1}{2}$ % MSA + N₂

Baker Lok-set Pkr @ 8442' w/ Standing Valve

Perf 8504-8512/32 0.32" holes

Ttd 1000g. 7 $\frac{1}{2}$ % MSA + N₂

PBD: 8559 KB. Ran 5 $\frac{1}{2}$ " 155° 17° KSS TAC Csg

TD: 8725 KB.

BEFORE THE OIL CONSERVATION DIVISION

OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF :
YATES PETROLEUM CORPORATION FOR DUAL :
COMPLETION AND DOWNHOLE COMMINGLING, :
EDDY COUNTY, NEW MEXICO :
CASE NO. 6511

APPLICATION

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

1. That applicant is the operator of the Pennsylvanian system underlying the N/2 of Section 22, Township 17 South, Range 26 East, N.M.P.M., Eddy County, New Mexico, upon which it has drilled its Tom Brown "GO" Com. No. 1 Well. This well is located within the boundaries of the Kennedy Farms Pool.

2. That applicant proposes to dually complete and commingle the Upper Morrow and the Strawn in the annulus and to produce the Lower Morrow formation through the tubing.

3. That the perforations are as follows:

Strawn: 8,064 - 8,070 Feet

Upper Morrow: 8,398 - 8,402 Feet

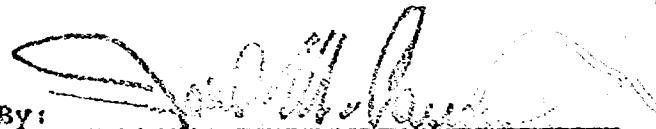
Lower Morrow: 8,504 - 8,512 Feet

4. That a diagrammatic sketch of the proposed dual completion and commingling in accordance with Rule 112(a) of the Division Rules and Regulations is attached hereto; that the mechanics of the proposed dual completion is feasible in accordance with good conservation practice; 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 permission to applicant to dually complete and commingle as is set forth above its Tom Brown "GO" Com. No. 1 Well for the production of gas from the Pennsylvanian formation of the Kennedy Farms Pool.
- C. And for such other relief as may be just in the premises.

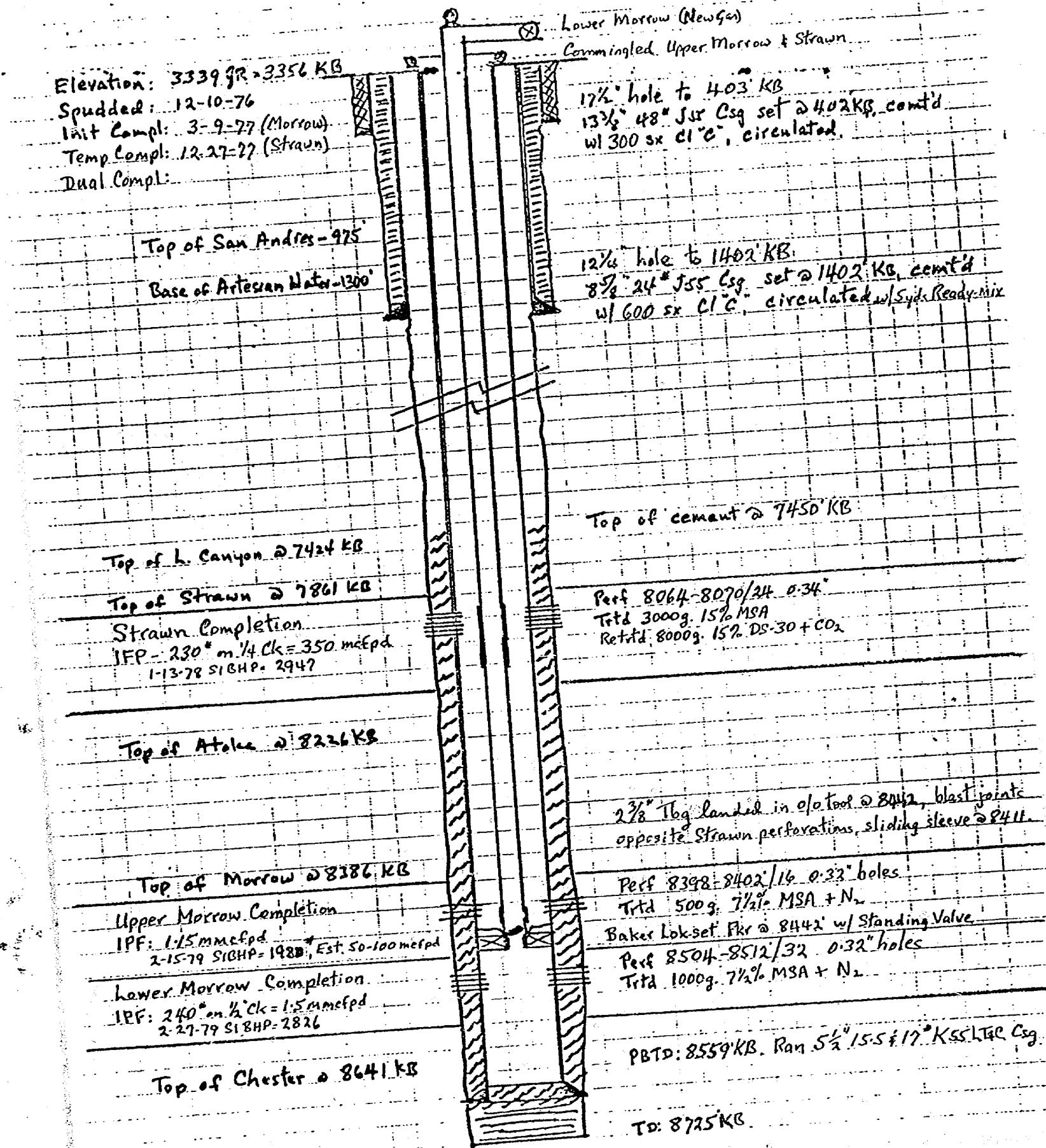
YATES PETROLEUM CORPORATION

By: 

Joel M. Carson
P. O. Drawer 239
Artesia, New Mexico 88210

Attorney for Applicant

Diagrammatic Sketch of Proposed Dual Completion, and Downhole Commingling



TOUCH

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. 6511

Order No. R-5983

APPLICATION OF YATES PETROLEUM CORPORATION
FOR A DUAL COMPLETION, AND DOWNHOLE COMMINGLING, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION *JDR* *AS*

BY THE DIVISION:

This cause came on for hearing at 9 o'clock a.m. on
March 28, 1979, 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,
seeks authority to complete its Tom Brown "GO" Com
Well No. 1, located in Unit C of Section 22, Town-
ship 17 South, Range 26 East, NMPM, Eddy
County, New Mexico, as a dual completion (conventional) to
(combination)
(tubingless)

oil
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.

(3) That the evidence presented established no sound engineering or geological reasons for ~~separately~~ dually completing and separately producing the Upper and Lower zones of the Morrow formation. ~~as required.~~

(4) That the evidence presented indicated that the proposed method of production may result in lower ultimate recovery of gas from the Morrow formation.

(5) That to prevent waste the subject application should be denied.

IT IS THEREFORE ORDERED:

(1) That the ~~applicant~~, ^{application of} Yates Petroleum Corporation, is hereby authorized to complete its Tom Brown "GO" Com Well No. 1, located in Unit C of Section 22, Township 17 South, Range 26 East Kennedy Farms Field, N.M.P.M., Eddy County, New Mexico, as a dual completion (conventional) (~~combination~~) (~~tubingless~~) oil 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. is hereby denied.

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

PROVIDED FURTHER, that the applicant shall take tests upon completion and annually thereafter during the Annual Test Period for the Pool.

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

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