

B CASE 6046: BELCO PETROLEUM CORPORATION
FOR COMPULSORY POOLING, EDDY COUNTY,
NEW MEXICO

Case Number

6046

Application

Transcripts.

Small Exhibits

ETC.

CAMPBELL, BINGAMAN AND BLACK, P. A.

LAWYERS

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JEFF BINGAMAN
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SEP 30 1977

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September 29, 1977

Mr. Daniel S. Nutter,
Examiner
New Mexico Oil Conservation
Commission
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 6046 - Application of Belco Petroleum
Corporation for Compulsory Pooling, Eddy County,
New Mexico

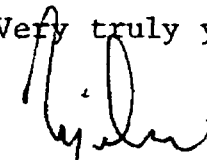
Dear Mr. Nutter:

At the hearing yesterday on the above-styled case Mr. Reginald Keyes, a witness for Texas Pacific Oil Company, stated that the USGS had approved Texas Pacific's request for permission to drill in the W1/2, Section 3, T22S, R25E. We have determined that the statement was in error.

Texas Pacific has received the permission of the USGS to stake a well location in the western half of Section 3 and has in fact staked the well location. The Company has filed an application with USGS for permission to drill, Intervenor's Exhibit No. 5, but the application has not been approved pending a determination of this case.

We desire to correct any misimpression on this issue.

Very truly yours,


Michael B. Campbell

MBC:mr

cc. Joe D. Ramey
Thomas W. Kellahin
Reginald Keyes

- CASE 6038: Application of W. Ridley Wheeler Estate for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in an undesignated San Andres reservoir by the injection of water into the San Andres formation thru the open-hole interval from 4800 feet to 4870 feet in its Markham Well No. 2, to be drilled 1980 feet from the South line and 25 feet from the East line of Section 28, Township 9 South, Range 35 East, Lea County, New Mexico.
- CASE 6039: Application of Gulf Oil Corporation for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of three Drinkard Pool wells on its Central Drinkard Unit in Township 21 South, Range 37 East, Lea County, New Mexico, as follows:
- Well No. 419, surface location 1631 feet from the South line and 260 feet from the West line of Section 28, to be bottomed approximately 1335 feet from South line and 15 feet from East line of Section 29; Well No. 421, surface location 1465 feet from North line and 1056 feet from East line of Section 32, to be bottomed approximately 1305 feet from North and East lines of Section 32; and Well No. 422, surface location 1155 feet from North line and 1000 feet from West line of Section 33, to be bottomed approximately 1305 feet from North line and 1335 feet from West line of Section 33.
- CASE 6040: Application of Gulf Oil Corporation for pool reclassification and a special GOR limit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of the North Teague-Devonian Gas Pool in Sections 22 and 27, Township 23 South, Range 37 East, Lea County, New Mexico, as an oil pool and the consolidation of said pool with the Teague-Devonian Oil Pool in Sections 27, 34, and 35 of said Township. Applicant further requests a special gas-oil ratio limit for said Teague-Devonian Oil Pool of not more than 5000 to one.
- CASE 6041: Application of Gulf Oil Corporation for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Harry Leonard Well No. 12 located in Unit P of Section 22, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to a previously approved 480-acre multiple well non-standard proration unit.
- CASE 6042: Application of Gulf Oil Corporation for a non-standard proration unit, simultaneous dedication, and unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 388.51-acre non-standard gas proration unit comprising the NW/4 and E/2 SW/4 of Section 6, and the NW/4 of Section 7, both in Township 22 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to applicant's H. T. Mattern Wells Nos. 6 and 3, at unorthodox locations in Unit N of Section 6 and Unit F of Section 7, respectively.
- VASE 6043: Application of V-F Petroleum Inc., for an unorthodox oil well location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox oil well location 330 feet from the South line and 2310 feet from the East line of Section 29, Township 8 South, Range 38 East, North Sawyer-Devonian Pool, Roosevelt County, New Mexico.
- CASE 6044: Application of Orla Petco for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to 3500 feet underlying the NE/4 NE/4 of Section 1, Township 23 South, Range 27 East, and also the NW/4 NE/4 of said Section, Eddy County, New Mexico, to form two 40-acre units, each 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 wells and the allocation of the costs 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 wells and a charge for risk involved in drilling said wells.
- CASE 6045: Application of Burleson & Huff for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the NW/4 of Section 12, Township 21 South, Range 36 East, Eumont Gas Pool, Lea 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 6046: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying all of Section 3, Township 22 South, Range 25 East, Catelaw Draw-Morrow Gas Pool, 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.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
28 September, 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of Belco Petroleum Cor-)
poration for compulsory pooling,) CASE
Eddy County, New Mexico.) 6046

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For Applicant, Belco: W. Thomas Kellahin, Esq.
KELLAHIN & FOX
500 Don Gaspar
Santa Fe, New Mexico

For Intervenor, Texas Michael Campbell, Esq.
Pacific: CAMPBELL, BINGAMAN & BLACK
Jefferson Plaza
Santa Fe, New Mexico

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1 MR. NUTTER: Call now Case Number 6046.

2 MS. TESCHENDORF: Case 6046. Application of Belco
3 Petroleum Corporation for compulsory pooling, Eddy County,
4 New Mexico.

5 MR. KELLAHIN: Do you want to take this case now
6 or after lunch? It will be longer than ten minutes.

7 MR. NUTTER: I think we'll start on it, Mr. Kellahin
8 anyway.

9 MR. KELLAHIN: Tom Kellahin of Kellahin and Fox,
10 appearing on behalf of the applicant, and I have two wit-
11 nesses to be sworn.

12 MR. NUTTER: We'll call for other appearances in
13 the Case Number 6046.

14 MR. CAMPBELL: Mr. Examiner, Mike Campbell with
15 Campbell, Bingaman, and Black, in Santa Fe, appearing on
16 behalf of Texas Pacific, in opposition to the application.

17 MR. NUTTER: I think you've also entered an ap-
18 pearance here, Mr. Campbell, not only to oppose the appli-
19 cation but possibly to consolidate it with another applica-
20 tion, is that correct?

21 MR. CAMPBELL: Mr. Examiner, we filed a motion to
22 consolidate this hearing with a hearing scheduled October 12
23 on an application by Texas Pacific to withdraw the acreage
24 in question from the Catclaw Draw-Morrow Gas Pool and place
25 it in the Revelation-Morrow Gas Pool. It was my understanding

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1 that the Commission or the Examiner, denied that motion to
2 consolidate. We're here to present evidence today in oppo-
3 sition to this compulsory pooling application. That evidence
4 will be the same that we would present on our hearing for
5 withdrawal of this acreage and re-dedicate it.

6 MR. NUTTER: I don't know where you got that im-
7 pression, Mr. Campbell, that we had denied the motion. I
8 figured we would hear arguments on the motion at this time,
9 if your motion is still alive.

10 MR. CAMPBELL: Your Honor, our motion is still
11 alive if the Examiner indicates that it is.

12 MR. NUTTER: Mr. Kellahin?

13 MR. KELLAHIN: I've not received a copy of the
14 motion to consolidate and continue, but I've become aware of
15 its existence and we are opposed to any continuance at this
16 time. We're ready to proceed with our case.

17 MR. NUTTER: You didn't receive a copy of the motion?

18 MR. KELLAHIN: No, sir, but we obtained it yester-
19 day from the Commission file.

20 MR. NUTTER: I see.

21 MR. CAMPBELL: Mr. Examiner, I might add that we
22 had a certificate of mailing on the motion directed to Belco
23 Petroleum Corporation, Mrs. Ward, I believe, and we did at-
24 tempt to mail a copy of that motion to consolidate to her.
25 I believe the motion indicates that we certified that a copy

1 was mailed to them.

2 MR. NUTTER: Well, that's what I thought that we
3 had a cover letter attached to it that indicated that. The
4 motion itself -- yeah, it has the certification attached to
5 it.

6 MR. KELLAHIN: It indicates it's -- you know, it's
7 a small matter. It indicates certified to counsel of record.
8 My name and address appears on the application. Texas Pacific
9 knew that I did represent Belco in this matter. I don't
10 care to contest the question of non-service. I am aware of
11 the motion and I do propose to argue it, if you want to hear
12 some more argument on it.

13 MR. NUTTER: Well, Mr. Kellahin, this matter in-
14 volves the same lands that are involved in the other case.
15 It's impossible for us to hear the other case today. So if
16 we hear the Belco case today, we're going to have to have
17 another hearing later on and hear the other case, unless it
18 should be withdrawn.

19 I'd like to hear some arguments from both of you
20 as to why we should proceed or why we should delay the hearing
21 on this case.

22 MR. KELLAHIN: If the Examiner please, I believe
23 the Texas Pacific application, as I understand it, is premature
24 in that it fails to comply with the Commission Regulations.
25 If you'll note Rule 1123, it says with regards to requests

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1 for extension of an existing pool or the creation of a new
2 pool. It's my understanding that they want to take acreage,
3 Section 3, that is currently in the Catclaw Draw, remove it
4 and extend the Revelation-Morrow, which is based on 320
5 spacing, and include Section 3 in that particular pool.

6 Rule 1123 says the operator of a well, which requires
7 the creation or extension of a pool, shall be given written
8 instructions by the appropriate District Office regarding
9 the filing of Form C-123 in duplicate. At this point Texas
10 Pacific does not have a well and therefore, is not in a posi-
11 tion to seek extension or amendment of the particular pool
12 rules.

13 It would appear to me that the appropriate solution
14 in this matter, inasmuch as the Commission has already deter-
15 mined at previous hearings that Section 3 is in fact a part
16 of the Catclaw Draw-Morrow, and is spaced on 640 acres, that
17 a well should then be drilled based on 640 acres, to avoid
18 drilling of unnecessary wells, and should once that well be
19 completed and should it become apparent that that well cannot
20 drain 640 acres, there is no reason that at a later time that
21 well could not be down-spaced and put in the Revelation-Morrow.
22 But at this point I believe that Texas Pacific's application
23 to extend Revelation-Morrow is premature and that force
24 pooling application based upon a 320-acre unit is inappro-
25 priate.

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1 MR. NUTTER: Well, I agree with you that the appli-
2 cation for extension is probably premature, but is there any
3 rule that relates to how you're supposed to proceed if you
4 want to contract the pool? There's no rule on that, and it
5 could be that they're not premature in that respect.

6 I might make the observation that the Catclaw Draw
7 Pool was extended here on the basis of geology that was
8 available to the Commission several years ago, and that there
9 have been some wells subsequently drilled that might change
10 the interpretation of that geology. I don't know, but there
11 has been some additional drilling done since that extension
12 was made.

13 MR. CAMPBELL: Mr. Examiner, I might add that in
14 terms of procedure before the Commission, I had read Rule
15 1123, and it did not appear appropriate to me in that there
16 is no drilling activity on Section 3 at this point; therefore
17 to go through the District Office for clearance would be im-
18 possible, really. It was my intention that to save the
19 parties and the Commission the time and expense of hearing
20 two different cases on this same acreage, that we would move
21 to consolidate both decisions.

22 The only thing I might add, Mr. Examiner, is that
23 it is our understanding that there may be some opposition
24 expressed by other operators on our application to eventually
25 end up with 320-acre spacing in Section 3, and I would -- I

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1 would at least alert the Examiner to the fact that we antici-
2 pate there may be some opposition to our eventual goal in
3 this matter, which might prohibit a decision on our applica-
4 tion at this point without notice to -- or without the oppor-
5 tunity for people to appear in opposition to our request for
6 320 spacing. It is my understanding that primarily the Hana-
7 gan Petroleum Company may oppose our request before the Com-
8 mission and it might be inappropriate for the Examiner to
9 rule without that input from Hanagan.

10 MR. NUTTER: Well, of course, we're not hearing
11 your application today.

12 MR. CAMPBELL: Yes, sir.

13 MR. NUTTER: And the notice here didn't technically
14 put Hanagan on notice that your application was even pending.

15 MR. CAMPBELL: Yes, sir, that's -- that's my con-
16 cern, Mr. Examiner, but we -- the evidence that we'll present
17 today in opposition to the application for compulsory pooling
18 will be the identical evidence that we would present on
19 October 12th in support of our motion -- in support of our
20 application.

21 MR. NUTTER: I think in view of all of this, we
22 will deny the motion now and recess the hearing and at 1:00
23 o'clock we'll resume the hearing of the Belco application.

24 (Thereupon the noon recess was taken.)
25

1 MR. NUTTER: Call Case Number 6046 back.

2 MR. KELLAHIN: The witnesses have not been sworn,
3 Mr. Nutter.

4 (Witnesses sworn.)

5
6 MARY WARD

7 being called as a witness and having been sworn upon her oath,
8 testified as follows, to-wit:

9
10 DIRECT EXAMINATION

11 BY MR, KELLAHIN:

12 Q Would you state your name, by whom you're employed,
13 and in what capacity, Ms. Ward?

14 A Yes, sir, I'm Mary Ward; I'm a land man with Belco
15 Petroleum Corporation.

16 Q Ms. Ward, have you previously testified before the
17 Commission in your capacity as a land man on behalf of Belco
18 in other cases?

19 A Yes, sir, I have.

20 Q And have you made a study of and are you familiar
21 with the land title situation with regards to Section 3, the
22 subject of this particular application?

23 A Yes, sir, I have.

24 Q Would you please refer to what we have marked as
25 Applicant Exhibit Number 1, and identify that for me?

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1 A. Yes, sir. Our Exhibit 1 is an outline of the Cat-
2 claw Draw-Morrow Gas Pool as designated by the Commission
3 Rule.

4 Q I note on your exhibit there are a number of Com-
5 mission order numbers and dates. What is the significance
6 of those?

7 A I suppose that's the dates that the Commission ruled
8 as to the particular sections being put in this Catclaw Draw
9 area, and according to R-4861 in November of '74, the Com-
10 mission put in Section 3.

11 Q Please refer to Exhibit Number 2 and identify it.

12 A This is merely a shot from our land plat showing
13 our Revelation Prospect, we call it, in the Revelation Field,
14 and Belco, as you will note, has drilled several wells under
15 320, which is their spacing.

16 Q All right. Let me direct your attention to, speci-
17 fically, Section 3 and ask you to describe the ownership
18 within that section.

19 A Yes, sir. The east half of Section 3 is owned by
20 Allied Chemical and the west half is Texas Pacific Oil Company.
21 It is held by them.

22 Q Wherein lies the Belco interest?

23 A Belco has a farm-out from Allied Chemical covering
24 the entire east half.

25 Q Please refer to Exhibit Number 3 and identify it.

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1 A Exhibit 3, since I do not have the formal farm-out
2 from the Allied Houston Office signed, Mr. Dow, who is the
3 land man with Allied in Midland, wrote me this letter so that
4 the Commission will see there is a farm-out and the terms
5 under which we're to receive the farm-out and we'll get the,
6 you know, the formal one just as soon as Houston has signed
7 it.

8 Q To the best of your knowledge, information, and
9 belief, is the final farm-out from Allied Chemical to comply
10 or correspond to the requirements or terms set forth in this
11 letter dated September 21st, 1977?

12 A That is right, and specifically, the number one, I
13 direct your attention there, that the well we drill will have
14 to be in the west half.

15 Q Is there any time restriction with regards to the
16 commencement of the well?

17 A Yes, there will be ninety days after the agreement
18 is signed.

19 Q Let me refer you now to what has been marked as
20 Applicant Exhibit Number 4, it has a number of pages to it;
21 would you please identify those, commencing with page one of
22 Exhibit 4?

23 A Yes, sir. We started back in the spring of 1975
24 trying to get a well drilled in Section 3. These are our
25 correspondence, letter copies, with Texas Pacific Oil. Now,

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1 we had no response to the first letter. To the page two Gulf
2 joined with us in some of the sections; of course, not 3,
3 since they weren't a member. Pennzoil farmed-out and Allied
4 farmed-out. Now, TP didn't answer this letter of June 9th.

5 Q Page three.

6 A In October, again, we wrote Texas Pacific; this is
7 October '76, asking if they would farm-out their west half of
8 Section 3 again, or join with us in drilling.

9 Q What, if any, response did you have to the letter
10 of October 5th?

11 A They answered that a month later saying that they
12 would not grant our request.

13 Q All right, page five. What is that?

14 A Page five is an August the 18th, '77 letter, this
15 year, where I wrote Texas Pacific telling them that we had a
16 farm-out from Allied Chemical covering the east half and since
17 this was a 640 spacing in the Catclaw Draw, that we'd like
18 for them to join or farm-out their west half so we could drill
19 that well.

20 Q And what, if any, response did you have to your
21 August 18th letter?

22 A They answered it, it will be page seven, is their
23 response on September the 8th, in which they again declined.

24 Q All right. Please refer to what has been marked
25 as Exhibit Number 5 and identify it.

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1 A This is merely a chronology rundown of our sincere
 2 efforts to get this well in Section 3 drilled from 1975 to
 3 date.

4 MR. KELLAHIN: I have no further questions from
 5 this witness, Mr. Examiner.

6 MR. NUTTER: Are there any questions of the witness?

7 MR. CAMPBELL: Mr. Examiner, just one.

8
 9 CROSS EXAMINATION

10 BY MR. CAMPBELL:

11 Q Ms. Ward, in all of your correspondence to Texas
 12 Pacific it has been your intent to drill a well on the western
 13 half of Section 3, is that correct?

14 A I would have to check back and see for sure.

15 MR. KELLAHIN: We have another witness.

16 A It was Section 3, probably a geologist will know.

17 MR. CAMPBELL: All right, that's fine.

18 MR. NUTTER: Are there any further questions? The
 19 witness may be excused.

20 MR. KELLAHIN: Call Mr. Lee Nering.

21
 22 LEE NERING

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

25

DIRECT EXAMINATION

BY MR. KELLAHIN:

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

A My name is Lee Nering. I'm employed in the capacity of Administrative Geologist for Belco Petroleum Corporation, Houston, Texas.

Q Mr. Nering, have you previously testified before the Commission and had your qualifications as an expert geologist accepted and made a matter of record?

A Yes, I have.

Q Have you made a study of and are you familiar with the facts surrounding this particular application?

A Yes, I have.

MR. KELLAHIN: If the Examiner please, are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q Mr. Nering, would you refer to what you have marked as Exhibit Number 6, identify it, and explain what information it contains?

A Exhibit Number 6 is the same exhibit as Exhibit Number 1, with the exception that on it are plotted the Morrow tests only in the vicinity of Catclaw Draw and the Revelation area, and it's purpose is to illustrate by color the high percentage of Morrow penetrations, which are of dry,

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1 junked, or of limited capacity.

2 Q What is the area Belco Petroleum desires to be de-
3 signated the operator of?

4 A Belco desires to be named the operator of Section
5 3, Township 22 South, Range 25 East, currently included in the
6 defined area of Catclaw Draw - Morrow Pool.

7 Q What is the spacing in the Catclaw Draw - Morrow
8 Pool, Mr. Nering?

9 A Spacing for the Catclaw Draw - Morrow Pool is 640
10 acres.

11 Q In order to form a 640-acre drilling unit for
12 Section 3, what interests have not agreed to join you?

13 A The interest under the west half, a Federal lease,
14 owned by Texas Pacific Oil Company.

15 Q Have you made a determination of a possible location
16 for this particular well within Section 3?

17 A Yes, we have. Our location is in keeping with the
18 spacing requirements of Catclaw Draw - Morrow requirements.
19 It's a location which is 1650 feet from the west line and
20 1650 feet from the south line. The location has not been
21 staked. We have taken the required necessary steps with the
22 Federal Government to apply for permission to stake the loca-
23 tion.

24 Q What is the proposed location that Belco desires
25 to drill?

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1 A The location, as repeated, 1650 from the west line
2 and 1650 from the south line of Section 3.

3 Q Okay. Do you have a recommendation with regards
4 to a risk factor that should be assessed against Texas Pacific
5 in the event Belco is designated the operator of the unit?

6 A Yes. We're asking for a 200 percent penalty risk.

7 Q Upon what do you base that recommendation?

8 A This risk penalty is based on three categories.

9 Q Would you explain those for us, please?

10 A The first, of course, is demonstrated by Exhibit
11 Number 6, which is the penetration map illustrating the high
12 percentage of Morrow failures, a ratio of perhaps one out of
13 two wells. I might point out that Belco has had the unfor-
14 tunate experience of having now drilled five wells in our
15 Revelation area, of which two are dry holes in the Morrow.

16 The second category or risk is one of mechanical
17 nature. This area is one of the exposure of the reef com-
18 plexes of the Guadalupian, and as a result there are consider-
19 able up-hole problems, as well as considerable down-hole
20 problems involving loss of circulation, requiring additional
21 expense and possible loss of the hole.

22 The third category of risk is one that I'd like to
23 emphasize, one that Belco is taking a considerable risk on;
24 that is a financial risk. As is pointed out, this involves
25 only spacing for the Morrow. In effect, Belco, by drilling

1 on the west half has the risk of spending \$200,000 without
2 gaining any interest down to the Morrow. This I consider of
3 extreme high risk.

4 Q Let me see if I understand you correctly, Mr. Nering
5 if the well is located on the west half, as you propose, and
6 if it is drilled to the Morrow and the Morrow is unproductive,
7 Belco would no longer have an interest in the well?

8 A It's my opinion that because any other spacing
9 requirements and pooling requires only 320 acres or less,
10 Belco therefore, unless a voluntary arrangement is made, will
11 have, in effect, drilled a free hole to the Morrow.

12 Q If that in fact occurs, Mr. Nering, what, if any,
13 benefit would be derived by Texas Pacific?

14 A Texas Pacific would have gotten a free hole to the
15 Morrow.

16 Q Let me direct your attention to what you have
17 marked as Applicant Exhibit Number 7 and identify it.

18 A Exhibit Number 7 is Belco's AFE for a well in our
19 Revelation area, which is the area of interest. Specifically,
20 this AFE is made out for the well that is currently testing,
21 located in Section 10 of 22 South, 25 East, which is identi-
22 fied by us as our RV 10-1. It's --

23 Q Is that located on your Exhibit Number 6?

24 A It is. In the northwest quarter of Section 10,
25 and specifically located 1980 from the south and 915 feet

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1 from the west line. I might add, if I may digress just a
2 moment at this point, the 915 feet location is one of the
3 other risk problems as faced in this area. It's one of the
4 requirements by the Federal Government, requiring archeological
5 surveys. And as a result of archeological problems in this
6 area, we were forced to move this location eastward.

7 Q While we're talking about particular wells, Mr.
8 Nering, would you at this point identify the other wells that
9 Belco has drilled in the Revelation - Morrow?

10 A Yes. In keeping with cost figures for wells in the
11 Revelation area, because of the mechanical risks involved,
12 we've had wells that cost total, completed cost, ranging from
13 \$514,000 to \$604,000, and there is reason to believe that
14 there may be as much as \$150,000 differential in cost for
15 wells drilled in the Revelation area. The Exhibit Number 7
16 is representative of what we believe to be the most likely
17 figure. It is subject to upward revision. The well is cur-
18 rently being tested.

19 At the casing point the well was slightly under the
20 AFE.

21 Q Now, let's go back to Exhibit 6 and identify those
22 Belco wells that you've had experience in drilling.

23 A Looking at Exhibit Number 6, Belco wells are located
24 in Sections 4, 9, 10, and 16 of 22 South and 25 East. Alto-
25 gether, as can be seen, we have drilled five wells in this

1 area and at the present time we regard these as one discovery
2 in the Morrow and two development wells in the Morrow, and
3 one discovery in the Strawn.

4 Q Would you take them by well and identify from which
5 particular Morrow Zone they produce, if at all?

6 A Yes. I think this is an example of definition of
7 pools, because Revelation illustrates very clearly some of the
8 problems that appear in definition of pools, particularly in
9 Morrow Pools. I might point out that Belco has drilled six-
10 teen Morrow tests in Eddy County and six in Lea County, and
11 I venture to say that we personally are unable to totally de-
12 fine Morrow. And as an example, in the Revelation area, I
13 would be at a loss to say which is the limiting factor relative
14 to zonation in the Morrow of the three wells, since all three
15 wells are perforated in differing intervals within the Morrow.

16 The conclusion, is it one pool or is it three pools?
17 It's my understanding that for convenience and, obviously
18 logical reasons, it should be lumped as Morrow; therefore, we
19 review this as lumped Morrow production, and I might say that
20 we feel the same way about Catclaw Draw.

21 Q Based upon your knowledge and experience of this
22 particular area, Mr. Nering, in your opinion will the well
23 located on the west half of Section 3 reasonably and effi-
24 ciently drain the 640-acre unit?

25 A At this time I think so. In view of the lack of a

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1 well, it's difficult to say since all five of our wells in
2 the Revelation area have proven to be great surprises to us.

3 Q Do you have a recommendation with regards to cost
4 of supervision while drilling the well and then after comple-
5 tion of the well?

6 A Yes. Based upon our experience in the number of
7 wells that we have drilled in Eddy County, and in particular,
8 western Eddy County, and specifically those where we are
9 presently producing, I'm recommending supervisory charge of
10 \$1700 a month and for a producing well, \$250.00 per month
11 supervisory charges.

12 Q On what do you base those recommendations?

13 A As indicated, these are figures derived from our
14 operations in the Carlsbad - Morrow Pool, the South Salt Lake
15 Morrow Pool, and the Los Pool.

16 Q And I assume Belco desires to be designated the
17 operator?

18 A We do.

19 Q In your opinion, Mr. Nering, will approval of the
20 application avoid the drilling of unnecessary wells?

21 A Yes.

22 Q Why?

23 A As I think I've indicated from some of my testimony,
24 the Morrow is a rock unit, five or six hundred feet in thick-
25 ness, and each one comes as a surprise, and I think one well

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1 should be drilled at a time.

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

5 A That's my opinion.

6 Q Were Exhibits 6 and 7 prepared by you directly or
 7 under your direction and supervision?

8 A They were.

9 MR. KELLAHIN: If the Examiner please, we move the
 10 admission of Belco Exhibits 1 through 7.

11 MR. NUTTER: Belco Exhibits 1 through 7 will be
 12 admitted in evidence.

13 MR. KELLAHIN: That concludes my direct examination
 14 of Mr. Nering.

15 MR. NUTTER: Are there any questions of the witness?

16 MR. CAMPBELL: Yes, Mr. Examiner.

17

18 CROSS EXAMINATION

19 BY MR. CAMPBELL:

20 Q Mr. Nering, referring to Exhibit Number 6, I assume
 21 that exhibit reflects drilling activity in the Catclaw Draw -
 22 Morrow Gas Pool and at its most recent date?

23 A Yes, it's within a month.

24 Q Now, Exhibit 6 indicates that there is no -- there
 25 has been no drilling activity in Section 27, Township 21 South,

1 Range 25 East. Could you identify by name the well you now
2 show in Section 26?

3 A In Section 26 there are two wells. This was the
4 original Catclaw Draw Unit Well drilled by Hanagan; the one
5 well was junked and the additional well was successful well.

6 Q And what would be what you're referring to as a
7 junked well; what would be the name of that well?

8 A Well, the junked well would be the one to the west.

9 Q Are you certain that there has been no activity in
10 Section 27?

11 A As I say, this is a take-off within the past month
12 and if there is a completion in there, I have no knowledge
13 of it at this time.

14 Q In your compilation of Exhibit Number 6, have you
15 run across a well designated as the Number 10 Catclaw Draw
16 Hanagan Well?

17 A Number 10? I have a Catclaw Draw map in my file.
18 If I'm not mistaken, it's got to be that one in 36 in the
19 northwest quarter. Number 11, I think, is in the southwest
20 quarter. I'd have to check my --

21 Q Would it surprise you to find out that the Number
22 10 Hanagan Catclaw well is in Section 27?

23 A In Section 27, yes, it would.

24 Q Now, Mr. Nering, should the compulsory pooling be
25 ordered for Section 3, as I understand it, Belco has a 320-

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1 acre spaced well in the southern half of Section 4 that is
2 adjacent on the western boundary of Section 3?

3 A Yes, it's spaced for 320 acres on statewide rules.

4 Q And also to the south and southwest of Section 3,
5 Belco is operating a well spaced at 320 in the eastern half
6 of Section 9 and western half of Section 10?

7 A The well in Section 9 is a designated well; it's
8 the only designated well in the Revelation area, and it's
9 designated as 320-acre spacing. The well in Section 10 is
10 still undesignated.

11 MR. CAMPBELL: That's all the questions I have.

12
13 CROSS EXAMINATION

14 BY MR. NUTTER:

15 Q Mr. Nering, whether there's a well in 27 or not,
16 I don't know, but the well in 22 was a dry hole in the Morrow,
17 isn't that correct?

18 A I'm sorry, 22, that's what my map reflects and
19 most of my examination has, of course, involved only, let's
20 say, within a few miles of Revelation. I don't pretend to
21 be an expert on the northern part of Catclaw Draw. But our
22 whole thesis has been on the basis of the fact that someone,
23 the good graces of the Commission decided at one time, Sec-
24 tion 3 belonged in Catclaw Draw and we have in all good faith
25 attempted to utilize the existing rules and regulations and

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1 followed these as closely as we could.

2 Q Okay. Well, we're not talking about the northern
3 part of the pool because we're coming south.

4 Now, in Section 26, do you know the reason why the
5 well there in the southwest of the northwest was a dry hole?
6 Was it a producer that was --

7 A I believe it was junked and that the one that's in
8 the -- as I read the record, that particular one, that was a
9 replacement well. If I'm not mistaken, they call that a 1-Y.

10 Q And so this other one was -- had mechanical prob-
11 lems of some sort?

12 A I believe so, and that's why in this instance, as
13 I pointed out under our risk category of mechanical conditions
14 this is a high risk mechanical condition area.

15 Q Now here in Section 34, is this well a recently
16 drilled well?

17 A Yes, it is.

18 Q And it apparently was a dry hole in the Morrow?

19 A Yes, it is.

20 Q Now, what about the well in Section 2 that's ident-
21 ified on your Exhibit Number 6 with "W.C."? Is that a Wolf-
22 camp well?

23 A That's a Wolfcamp well, drilled to the Morrow.
24 The map illustrates Morrow penetrations.

25 Q And it was non-productive in the Morrow?

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1 A. They didn't complete it there; they completed it
2 in the Wolfcamp. I can't say for certain. If I may elab-
3 orate on that, Belco's attitude about Morrow dry holes is
4 that the only thing one can say about a Morrow dry hole is
5 that it condemns the borehole, and that Belco has at the
6 present time, considerations involving re-entries of Morrow
7 quote "dry holes", so that in answer to that question, I
8 can't say that it is definitely, in our opinion, a dry hole.
9 Any Morrow penetration, that in some instances, what I'll
10 label as Morrow dry holes are only Morrow dry holes due to
11 bad completion practices; that with new interest and perhaps
12 drilling a twin well, it's possible to complete a successful
13 Morrow hole.

14 Q. Who drilled that well and completed it in the Wolf-
15 camp?

16 A. Hanagan.

17 Q. Hanagan did it? And Hanagan is also the one that
18 drilled most of these wells in the Morrow in the Catclaw
19 Draw Unit, is that correct?

20 A. That is correct.

21 Q. How about the well in the south half of Section 2?

22 A. That was drilled by an operator by the name of
23 Brown. I'm not that familiar with it other than the oper-
24 ator's name is Brown.

25 Q. Non-productive in the Morrow, though, where --

1 A. Well --

2 Q. Not completed as a producer in the Morrow, let's
3 put it that way.

4 A. It was a plugged well.

5 Q. Now, your well in Section 4 is a Morrow well, cor-
6 rect?

7 A. Yes, sir.

8 Q. What's the potential on that one?

9 A. I can read from the Federal form. I have another
10 compilation. The well in Section 4 was perforated over a
11 400-foot overall interval and completed for 4024 Mcf per day.

12 MR. KELLAHIN: What was the number again?

13 A. 4024 Mcf per day. From 400 feet of overall per-
14 forations involving both what we describe as Upper Morrow
15 sequence and Lower Morrow sequence; these being divided into
16 general intervals of approximately 350 to 400 feet Upper
17 and 200 feet Lower. The Jones Well, the discovery well in
18 Section 9 is completed in an overall interval of 37 feet for
19 a 24-hour potential of 5976 Mcf per day. The well -- the 37
20 feet is exclusively in the Lower Morrow. The well that's in
21 Section 10, which is currently testing, was perforated on
22 Monday of this week. It has an overall perforated interval
23 exclusively in the Lower Morrow of 127 feet. Our latest
24 testing report indicates that it's testing around 2,000,000
25 a day. I might add that this particular well is indicating

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1 something that is -- needs to be further defined, but it is
2 indicating a higher GOR than our previous wells in this area,
3 and compares more favorably with the GOR in Hanagan's Number
4 9 and Number 10 Well in the Catclaw Draw; both of which are --

5 Q And where are the 9 and 10?

6 A Sections 35 and 36. As I indicated, our wells 9
7 and 10 are strictly Lower Morrow and from differing zones,
8 and I would point out that if one were to examine all of the
9 completions in Catclaw Draw, one would discover that all of
10 the perforations are not all in the same specific sand, if
11 such can be identified.

12 Q Are you acquainted with the hearing, Mr. Nering,
13 at which the Catclaw Draw Pool was extended to include Sec-
14 tions 27, 34, and 3?

15 A I read the transcript, Mr. Examiner, and I came to
16 the conclusion that it was in the best interest of conser-
17 vation and correlative rights that the Catclaw Draw Pool
18 should be defined by specific limitations, but that the
19 specific rules dealing with Catclaw Draw - Morrow would apply
20 only to that area, and this, as I understood it, seemed to
21 be the reason why an area was defined as Catclaw Draw, which
22 did not actually include completed wells, which is the normal
23 case of procedure.

24 Q Yeah, you're -- I think you're right there, that
25 this extension was made at a time when 320-acre development

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1 was approaching 640-acre development over on the east side
2 of the pool and the Commission was trying to define the
3 limits where the 320-acre pool and the 640-acre pool would
4 abut against each other, and you're also, in reading that
5 transcript, you noted that Sections 27, 34, and 3 were in-
6 cluded in the pool based on the best available geology at
7 that time.

8 A I understand that, yes.

9 Q Without there being any wells drilled there.

10 A In rebuttal to that, Mr. Examiner, I would say that
11 the best geology, geology being defined by structure map and
12 isopaching map and in the case of the Morrow, we're dealing
13 with a 600-foot interval which at best can be described as
14 extremely difficult to define by isopaching or by structure.
15 It's very difficult to depict structural picks, to begin
16 with, and it is very difficult to apply net quality within
17 any one sand of the Morrow, and that utilization of gross
18 sands for isopaching work, is at best disastrous, because
19 much of the problem in completing in Morrow Sands, as I am
20 sure you have been exposed to many times, is one of permeabi-
21 lity, and permeability is extremely difficult to define in
22 geology. And as such, it's my contention that dry holes
23 aren't necessarily Morrow dry holes. I don't think that the
24 definition of a pool can be restricted by a well spot. I
25 think it has to be done on an arbitrary basis, which I think

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1 the Commission tried to do at that time to the best of their
2 knowledge, and I can only repeat that Belco has progressed
3 in this matter from its inception in 1975, acting in every
4 good faith that Belco had trying to follow the existing rules
5 and regulations.

6 Q Now, in the hearing at which this pool was extended,
7 there was an exhibit. Did you just read the transcript or
8 did you look at the exhibits?

9 A I've been through the file.

10 Q Do you recall that exhibit showed a structural
11 feature coming down through Sections 27, 34, and into 3,
12 which justified the extension of the pool at that time?

13 A I think, yes, I think we can see that same type
14 of a structure on a very recent map by Hugh Hanagan.

15 Q Now do you know if there's been any development
16 subsequent to that time that would cause us to revise that
17 structural map and make it --

18 A Moderately, yes. The Hanagan Well in Section 34
19 does make a minor modification, but I emphasize that --

20 Q That's the well in 34?

21 A Yes, sir. The structural maps alone do not give
22 you Morrow pools.

23 Q It doesn't give you the permeability?

24 A No, sir, it does not give you the sand content,
25 either. It's also difficult to make correlations and you may

1 make busts in the structural configurations.

2 MR. NUTTER: Are there any further questions of Mr.
3 Nering? He may be excused. Do you have anything further at
4 this time, Mr. Kellahin?

5 MR. KELLAHIN: No, sir.

6 MR. NUTTER: Mr. Campbell, do you have a witness?

7 MR. CAMPBELL: Yes, Mr. Examiner. If I might, I'd
8 like to read into the record a brief statement that we have
9 to set the tenor of our opposition to this compulsory pooling
10 application.

11 It is the contention of Texas Pacific, which we
12 believe is supported by geologic data, that the productive
13 limits of the Catclaw Draw - Morrow Gas Pool have been clearly
14 established on the southwest corner of the pool by a series
15 of seven dry hole wells. These dry holes offset Section 3
16 to the north and to the east. We believe that the evidence
17 will show that Section 3 is outside of the productive limits
18 of the Catclaw Draw - Morrow Gas Pool and that the special
19 640 spacing rules applicable to that field are not applicable
20 to Section 3.

21 For the record, I would briefly like to review
22 our understanding of the history of the Catclaw Draw - Morrow
23 Gas Pool. The pool was established on June 21st, 1971, in
24 Order Number R 4157 after application by Hanagan Petroleum
25 Corporation for establishment of a new pool and for special

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1 pool rules.

2 The Commission ordered the establishment of the
3 Catclaw Draw - Morrow Gas Pool for Section 26, Township 21
4 South, Range 25 East, and promulgated Special Rules for the
5 pool, one of which being 640 spacing units.

6 Rule 1 of the Special Rules provided each well com-
7 pleted or recompleted in the Catclaw Draw - Morrow Gas Pool
8 or in the Morrow formation within one mile thereof and not
9 near to or within the limits of another designated Morrow
10 Gas Pool shall be spaced, drilled, operated and produced in
11 accordance with the Special Rules and Regulations hereinafter
12 set forth.

13 The rules were temporary and the Commission ordered
14 operators to appear at a later date to show cause why the
15 pool should not be developed on 320-acre spacing.

16 Approximately two years later, on August 22nd, 1973,
17 the Commission reopened Order Number R-4157 to determine
18 whether the Catclaw Draw should be developed on 320-acre
19 spacing. In Order Number R-4157A the Commission determined
20 that the field was not fully developed and continued the
21 special 640 spacing for another year.

22 In the interim the Catclaw Draw - Morrow Field
23 continued to expand on the Commission's own motion. On
24 September 4th, 1974 the Commission again reopened hearings,
25 Mr. Nutter presiding, to determine whether the Catclaw Field

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1 should revert to 320-acre spacing. In Order Number R-4157B,
2 issued October 22nd, 1974, the Commission found that the
3 special 640 spacing should continue into the foreseeable
4 future. In that Order, however, the Commission expressly
5 limited the applicability of the special spacing rules. In
6 Finding Number 7 the Commission stated that the productive
7 limits of the field had been effectively defined in all
8 directions with the possible exception of the southwest.
9 The Commission further stated in Finding Number 9 that to
10 avoid conflicts of spacing patterns and violation of corre-
11 lative rights, the pool rules for the Catclaw Draw - Morrow
12 Gas Pool, including 640-acre spacing units and prorationing
13 of gas, should be limited to the established productive
14 limits of the pool and not, as is often the case in other
15 pools, to the pool limits and to lands outside said limits
16 but within one mile thereof.

17 The Commission therefore amended Rule Number 1 of
18 the Special Rules and Regulations for the Catclaw Draw Field
19 to read as follows: Each well completed or recompleted in
20 the Catclaw Draw - Morrow Gas Pool, as defined by the Com-
21 mission, shall be spaced, drilled, operated, and prorated
22 in accordance with the rules for the Catclaw Draw - Morrow
23 Gas Pool set forth herein.

24 After the matter in Order Number R-4157B had been
25 heard but before the Order itself was actually issued, the

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1 Commission on its own motion, expanded Catclaw Field to the
2 southwest to include Sections 27 and 34 in Township 21 South,
3 Range 25 East, and Section 3, Township 22 South, Range 25 East.
4 Presumably, the Order evidenced that the southwestern pro-
5 ductive limits of the field had -- were being extended based
6 on the best available geologic evidence at that time. We
7 believe that geologic evidence is different at this point in
8 time.

9 Subsequent to the inclusion of Section 3 in the
10 Catclaw Pool dry holes in that field and formation were
11 drilled directly to the north of Section 3 in Sections 27 and
12 34 in Township 21 South, Range 25 East, Dry holes in that
13 field and formation also offset Section 3 to the east. There
14 has been no drilling activity in Section 3 itself.

15 In sum, we believe that the productive limits of
16 the Catclaw Draw - Morrow Pool are now firmly established
17 on the southwest boundary and that those productive limits
18 do not include Section 3, Township 22 South, Range 25 East.
19 We assert that to order compulsory pooling on 640-acre
20 spacing for the western half and the eastern half of Section
21 3 would be inequitable and violative of our correlative rights.
22 As our evidence will show, Section 3 is, or will be, offset
23 to the west and south by wells spaced at 320 acres in the
24 Revelation - Morrow Gas Pool. We believe that that pool is
25 where Section 3 belongs.

1 To substantiate our contentions we will present
2 testimony of two witnesses, Mr. Reginald Keyes, a senior
3 geologist with Texas Pacific Oil Company, and Mr. Mel
4 Schroeder, an area engineer with the Company. The witnesses
5 will offer four exhibits in support of our position.

6 I might add in closing that Texas Pacific is in no
7 way reluctant to develop its acreage in Section 3. In July
8 of this year the company filed an application with the USGS
9 for permission to drill on its acreage in the western half
10 of Section 3. The application designated the applicable field
11 as the Revelation Field, based on geological data reflecting
12 that the productive limits of the Catclaw Field did not in-
13 clude Section 3.

14 In other words, Texas Pacific is ready and willing
15 to drill in the appropriate field.

16 If the Examiner has no questions of me, we will call
17 Mr. Keyes.

18 MR. NUTTER: Let's take a fifteen minute recess
19 first.

20 (Thereupon a recess was taken.)

21 MR. NUTTER: The hearing will come to order, please.
22 Mr. Campbell, would you call your first witness?

23 MR. CAMPBELL: We'll call Mr. Reginald Keyes.
24
25

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REGINALD KEYES

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

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Would you please state your name and occupation?

A I'm Reginald Keyes, a Senior Geologist with Texas
Pacific Oil Company.

Q And have you testified before this Commission be-
fore?

A Yes, I have.

MR. CAMPBELL: Your Honor, are there any objections
to the witness' qualifications?

MR. NUTTER: No, sir, I need to know how he spells
his name.

A K-E-Y-E-S.

MR. NUTTER: Thank you.

Q Mr. Keyes, do you have a copy of Intervenor's Ex-
hibit 1?

A Yes.

Q In this matter? Would you please -- did you pre-
pare that exhibit?

A Yes, I did.

Q Would you please explain what that exhibit reflects?

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1 A. Intervenor 1 is a Morrow structure map based on the
2 Morrow clastics; this is where we picked the top of the Mor-
3 row. Incidentally, this is the same where Belco picks their
4 top.

5 This map indicates by color code wells in the Cat-
6 claw Field are colored in green; wells in Revelation are
7 colored in brown; and a series of dry holes on the west side
8 of Catclaw and in between Revelation and Catclaw that are
9 colored in orange.

10 This structure map shows a pronounced ridge running
11 northeast/southwest across this area, with the regional
12 syncline on the west side in a southeast dip component. This
13 map also shows in red the acreage in question in Section 3
14 of Township 22 South, Range 25 East.

15 This map has merit in the fact that some of these
16 dry holes, especially on the west side of Catclaw were drill-
17 stem tested and recovered water, formation water.

18 Q Mr. Keyes, are you familiar with Commission Order
19 Number R-4157B?

20 A. Yes, I am.

21 Q And what does that order allow?

22 A. It allows that the productive limits of Catclaw
23 Field would not be extended greater than the production it-
24 self; beyond the production itself.

25 Q And in reviewing Intervenor's Exhibit 1, are you

1 able to draw any conclusions from that exhibit as it relates
2 to definition of productive limits?

3 A By this map, yes, by the series of dry holes that
4 are color-coded in orange, this shows a distinct separation
5 between Catclaw and Revelation Fields. I'll further sub-
6 stantiate this premise with two Isopach maps, which I'll pre-
7 sent.

8 Q Mr. Keyes, do you have a copy of Intervenor's Ex-
9 hibit Number 2?

10 A Yes.

11 Q Was that exhibit prepared by you or at your direction?

12 A It was prepared by me.

13 Q And would you explain what Intervenor's Exhibit 2
14 reflects?

15 A Intervenor 2 is a Morrow -- is an Upper Morrow Sand
16 isopach. It's a net pay isopach. The parameters used here
17 were 7 percent porosity cutoff, water saturations, calculated
18 water saturations of 50 percent or less, and taking into ac-
19 count all drill-stem test data that was available on the
20 dry holes, and the producing wells. If a well produced water,
21 that well was discounted as far as net pay. If it was tight,
22 it was also discounted. If there was any interval that was
23 not tested, these were calculated to see if any of the net
24 pay parameters would justify assignment of net pay to that
25 particular well. This map shows by color code, also, that the

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1 Upper Morrow producers in this area, circled in red and
2 colored in red; the Lower Morrow producers are shown by square
3 colored in green.

4 Again, the dry holes separating these two fields,
5 are colored in red, and an appropriate symbol assigned.

6 Q Reviewing Intervenor's Exhibit 2, are you able to
7 draw any conclusions as to the productive limits of Catclaw
8 Draw - Morrow Gas Pool?

9 A Yes, based on the parameters we have assigned to
10 this net pay isopach, it becomes evident that in a westerly
11 direction in Catclaw and a southwesterly direction, the pay,
12 the net pay parameters indicate that this is thinning, or is
13 becoming less.

14 In Revelation Field, being that there are just a
15 few wells here, it shows that the Section 3, there is no in-
16 formation so we have to infer the productive limits of that
17 field, and that's the reason that the isopach values, the
18 aspect shows a dashed line there.

19 MR. CAMPBELL: Mr. Examiner, would you care to
20 interpose questions as we go through these exhibits, or would
21 you like to wait until the end?

22 MR. NUTTER: Sometimes if I don't understand some-
23 thing I might interpose a question.

24 MR. CAMPBELL: All right, fine. Fine.

25 MR. NUTTER: I might do that right now, Mr. Keyes.

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1 This isopach up here in the Catclaw portion of this exhibit
2 is an isopach of the Upper Morrow, correct?

3 A Yes, sir.

4 MR. NUTTER: Now, we have a number of green wells
5 out here, which would be Lower Morrow.

6 A Lower Morrow. I will present -- Intervenor's 3
7 will be an isopach of the Lower Morrow.

8 MR. NUTTER: Okay, fine.

9 Q (Mr. Campbell continuing.) Mr. Keyes, do you have
10 a copy of what has been marked Intervenor's Exhibit Number 3?

11 A Yes.

12 Q And was that exhibit prepared by you or under your
13 direction?

14 A Yes, it was; I prepared this exhibit.

15 Q Would you explain what Intervenor's Exhibit 3 re-
16 flects?

17 A Again, the color code remains the same as to de-
18 signation of productive horizon. Again, we see the various
19 wells that have been designated dry holes have been assigned
20 a zero value, indicating that in our opinion there is no
21 productive zone in those wells.

22 In the Revelation Field we see that the RV-4, the
23 well in Section 4, produces from the Lower Morrow, as well
24 as the Upper Morrow, and we've assigned 8 feet as possible
25 as pay.

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1 The Jones Well, which is the discovery well, is
2 not -- has not been perforated in the Lower Morrow. It does
3 not have any pay, net pay, assigned to it, and the Belco RV-10
4 does not fall within the parameters that we have assigned,
5 even though it was mentioned previously, by previous testi-
6 mony, that that well was perforated on Monday, information
7 was unavailable to us, and I think it's producing 2,000,000
8 cubic feet.

9 MR. NUTTER: Now, Mr. Keyes, you went through
10 those parameters, they're not on the exhibit, I didn't write
11 them down. Would you repeat the parameters, please?

12 A Yes, sir. The porosity of 7 percent, or greater,
13 water saturation is 50 percent, or less.

14 MR. NUTTER: 50 percent?

15 A Yes, sir, or less, and all drill-stem test data
16 on the wells, as I say, if they tested water it was considered
17 as no pay, or tight, and the remaining intervals that were
18 not tested were scanned -- were looked at for possible pay,
19 and as it turned out, we didn't -- based on those parameters,
20 none of these wells had any pay in them.

21 Again, this isopach shows in a westerly direction
22 and a southwesterly direction the net pay is becoming less,
23 and based on the isopach contours the dip or the interval
24 established, none of these wells on the west side, southwest
25 side, or south side, had any pay at all in the Lower Morrow,

1 and they are non-productive in the Lower Morrow.

2 I would like to point out to you that as it was
3 earlier, the well in Section 2, Hanagan's Number 1 North Fort
4 Unit, is a Wolfcamp Well. It is a shut-in gas well, completed
5 in '76; it has not produced, but it was dry in the Morrow,
6 therefore our symbol reflects a dry hole in the Morrow.

7 Q (Mr. Campbell continuing.) Mr. Keyes, do you have
8 a copy of Intervenor's Exhibit Number 4?

9 A Yes, I do.

10 Q And was that exhibit prepared by you or at your
11 direction?

12 A It was prepared by me.

13 Q And would you please indicate what Intervenor's
14 Exhibit 4 reflects?

15 A Intervenor's Number 4 is a cross section, strati-
16 graphic cross section. On the lower lefthand corner of the
17 map you will see an index map showing four wells that have
18 been -- that are in this cross section.

19 The first well on the left of this is Well Belco
20 Number 1-RV-4 in the Revelation Field. Also on this map
21 you will notice that in the tract -- in the depth column of
22 the logs, is colored red; this is where Belco has perforated
23 their RV-4. You'll notice that according to the designations,
24 the structural designation -- or stratigraphic designations,
25 this has been divided into the Upper and Lower Morrow. No

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1 finite sand designation, this is a gross designation.

2 The second and third wells on there, the second well
3 is Hanagan -- from the left -- is Hanagan's Number 1 Round
4 Mountain, recently drilled, plugged on August 10th this year.
5 This well was tested and tested in Upper Morrow Sand, recovered
6 water on this sand; a low gas, but it recovered over 1405
7 feet of water. Also, the lower part was drill-stem tested,
8 recovered 720 feet of mud, indicating this to be a tight zone.

9 Hanagan's Number 1 North Fork Unit, again in Section
10 2, 22 South, 25 East, this portion of the log shows the Mor-
11 row only. Hanagan attempted a completion in this well. If
12 you look at it, you'll see some vertical -- or some horizontal
13 lines about 300 feet -- 200 feet below the top of the datum.
14 Hanagan perforated this zone, acidized it, and it flowed at
15 the rate of 300 Mcf a day. Hanagan abandoned this well, and
16 incidentally, the last drill stem test there was the one that
17 recovered water, so a structural map does imply some kind of --
18 some indication of whether or not you might have a well or
19 not.

20 And finally, the last well on that section is Hana-
21 gan Number 9 Catclaw Draw Unit in the Catclaw Field. This
22 well is producing from a very basal Morrow Sand. It was
23 calculated for 10,600,000 Mcf. They also took a drill-stem
24 test in the upper part of this Morrow and that well eventually
25 will be a recompletion because that zone flowed 4.873 million

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1 cubic feet of gas.

2 In summary, what we have demonstrated here, is that
3 there is quote a dry hole barrier between these two fields;
4 that the wells on the west side of Catclaw recovered water;
5 two wells that are very close to Section 3 are tight; basically
6 they are tight; the east half of Section 3, if a well were to
7 be drilled there, whether it would be on 320 or 640, is a
8 very high risk -- would be a very high risk venture. The
9 most logical place to drill a well in Section 3 is where we
10 propose to drill a well, as well as Belco, but we intend to
11 drill a well there, or participate in a well. We are not
12 trying to force -- or not have a well drilled; we want to
13 drill a well there and we have made preparations to drill a
14 well there.

15 Q Mr. Keyes, do you have an opinion as to the result
16 of an order of compulsory pooling in Section 3?

17 A Well, I believe that at the time that this well --
18 this section was put into the Catclaw, geological evidence
19 so indicated, but right now, in view of the recent develop-
20 ments, I think that this well is no longer in communication
21 with Catclaw, and if it is in communication, it would be in
22 communication with Revelation.

23 Q What would be the result of an order of 640-acre
24 spacing on Section 3?

25 A Well, we would then be -- we would then be offset

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1 by 320-acre spacing -- a 320-acre spacing field. We would
2 then be subject to another well being drilled in Section 4.
3 We would be surrounded by three and maybe four wells, because
4 as you noticed in this -- on any of the maps you have, Mon-
5 santo has a location staked in Section 10 in the northeast
6 quarter. This well is not drilling yet, but there is a loca-
7 tion staked, and Monsanto staked this well in the Revelation
8 Field.

9 And we would be -- we would be drained, I think,
10 eventually we would be drained and we would be forced -- our
11 correlative rights would be violated.

12 Q And has Texas Pacific filed with the USGS an appli-
13 cation to drill on your western half of Section 3?

14 A Yes, we filed a location with the USGS and in pre-
15 paration for filing with the Commission. We have a location
16 of 1980 feet from the south line and 990 feet from the west
17 line of Section 3, 22 South, Range 25 East. This would be
18 normal, normal spacing on 320-acres.

19 MR. CAMPBELL: Mr. Examiner, I have no further
20 questions for Mr. Keyes.

21 MR. NUTTER: Are there any questions of Mr. Keyes?

22 MR. KELLAHIN: If the Examiner please.

23 MR. NUTTER: Mr. Kellahin.
24

25 CROSS EXAMINATION

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1 BY MR. KELLAHIN:

2 Q Mr. Keyes, how many wells does Texas Pacific oper-
 3 ate in the Catclaw Draw - Morrow?

4 A We have none.

5 Q And do you operate any wells in the Revelation -
 6 Morrow?

7 A No.

8 Q How many Morrow tests have you drilled in Eddy
 9 County?

10 A We've drilled two in the Kennedy Farms Field east
 11 of Artesia. We've participated in that same field with
 12 Yates Petroleum on at least four other wells.

13 Q The two wells you've drilled, what was the results
 14 of those wells?

15 A Okay, both of them were producers.

16 Q Take a look at your Exhibit Number 1, please.

17 A All right.

18 Q If I understood your conclusion correctly, you
 19 said that structural position played an important part in
 20 picking a Morrow location.

21 A Yes, I said it can.

22 Q And that your conclusion is it does in this area?

23 A Yes, it does.

24 Q I assume that the higher you are on the structure,
 25 the better well you would have?

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1 A. Not necessarily, no, because -- because that can
2 be attested by Belco's two dry holes in Section 16.

3 Q. That was my point. It's higher structurally --

4 A. Yes.

5 Q. -- in Section 16, and yet Belco's --

6 A. But if you know there's water -- if you know there
7 is water in the area you're not going to drill a well even
8 though your structural position is such that you'll be on
9 strike with that well. You cannot discount the structure
10 map completely, because if that Belco -- I wonder -- I ques-
11 tion how Belco is picking their locations if they discount
12 structure and isopachs.

13 Q. Well, your counsel had the opportunity to ask my
14 witness that and I'm going to ask you some questions along
15 this line, too.

16 Let's look at Section 3. We don't have any control
17 in Section 3 as to the structure contour lines, do we? We're
18 waiting for the well in Section 3 to determine that, are we
19 not?

20 A. That's true, but you notice you've got -- you have
21 a well in Section 34 and I've honored that well with a -1680
22 foot contour.

23 Q. It's your contention that the well in Section 34
24 condemns the entire 640 acres as to Morrow --

25 A. Of Section 34?

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1 Q Yes, sir.

2 A Yes, sir, I do.

3 Q And with regards to Section 27, you believe the
 4 Hanagan Well in Section 27 condemns the entire 640-acre
 5 tract for Morrow production?

6 A I do.

7 Q Why could not your contour lines have simply been
 8 eliminated here between Section 3 and 35 and we would assume,
 9 then, that the Catclaw Draw continues down into Section 3?
 10 This is just a guess, is it not?

11 A Well, yes, but the point is we are not dealing --
 12 the field delineation is not based on structure. We're
 13 dealing with porosity and permeability, and my --

14 Q Of what use is this plat, then, you'll have to help
 15 me; I don't understand.

16 A Well, it shows the grain of the Morrow. It shows
 17 that there's a ridge going there and the thing is dipping to
 18 the southeast.

19 Q I see it shows a ridge but I am unconvinced that
 20 there is control there to establish the ridge.

21 A Well, why couldn't there be? I mean that -- well,
 22 I could cut it short. All that would show would be flattening
 23 in there and then I could interpret that by cutting that --
 24 cutting both fields off completely. If I further interpret
 25 this, I could cut those fields off completely on a structure

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1 map.

2 Q Let's look at Section 10 here. There's a Monsanto
 3 Well that's indicated Monsanto 1 Catclaw?

4 A That's right.

5 Q Do you know why it was ever labeled Catclaw?

6 A No, I don't know why they designated it, but they
 7 filed it in Revelation Field.

8 Q I notice you've obviously divided your isopachs into
 9 the Upper Morrow and the Lower Morrow.

10 A Based -- based on the interval that's shown on the
 11 Intervenor 4.

12 Q Could we go to 4 and have you define for me how you
 13 pick the Upper and Lower?

14 A Yes, the Upper -- on Intervenor 4? The top of the
 15 Lower Morrow is based on a shale break that carries across
 16 the field.

17 Q Just a minute, let me find it.

18 A It carries -- this is a persistent in the area.
 19 Beyond the area I will not say anything beyond that, but it
 20 is in the area, and this is merely to isolate the zones.

21 MR. KELLAHIN: I have no further questions at this
 22 point.

23 MR. NUTTER: Are there any other questions at this
 24 time for Mr. Keyes?
 25

CROSS EXAMINATION

BY MR. RAMEY:

Q Mr. Keyes, you say you've filed for a location in the west half of Section 3 for a Revelation well?

A I say -- with the New Mexico Commission?

Q I'm assuming the USGS.

A With the USGS, yes, we even have a -- the file here and we have -- we show our surveyor's plat.

Q Has it been approved by the USGS?

A Yes, sir.

MR. KELLAHIN: What was the date when that was filed, Mr. Keyes? Do you recall?

A No. I don't know when it was filed.

MR. CAMPBELL: July 18th, 1977.

MR. NUTTER: Are there any other questions of the witness? He may be excused.

MR. CAMPBELL: Mr. Examiner, we have available to answer questions, either your questions or those of the Applicant, on engineering data related to -- to our opposition to forced pooling; I don't know whether it would be wise to present that engineering data at this time or whether you would like us to withhold that for the October 12th hearing.

MR. NUTTER: If it relates to the forced pooling, I think we would want to hear it. If it relates to the separation of pools, it's probably better kept until later.

1 I realize that to some degree the two are intermeshed, even
2 though we're hearing one today and the other October the 12th.

3 MR. CAMPBELL: Well, Mr. Examiner, if you any --
4 if you have any questions that an engineer could answer re-
5 lated to the effect of a -- well, I'll put him on briefly and
6 we'll see if we can get through with it.

7

8 MEL SCHROEDER

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

11

12 DIRECT EXAMINATION

13 BY MR. CAMPBELL:

14 Q Would you please state your name?

15 A Melvin L. Schroeder.

16 Q And have you testified before the Commission before?

17 A Yes, sir, I have.

18 Q What is your position with Texas Pacific Oil Com-
19 pany?

20 A I am an area engineer in the Midland office.

21 MR. CAMPBELL: Mr. Examiner, are there any objections
22 to the qualifications of the witness?

23 MR. NUTTER: No, he's qualified.

24 Q Mr. Schroeder, would you -- have you done some en-
25 gineering study and compiled some engineering data on the

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1 application of Belco for forced pooling?

2 A Well, I've looked at some pressure cum responses
3 in the Catclaw Draw Field and tried to relate them to the
4 net pay in the Catclaw Draw wells to make inferences as far
5 as the drainage radius, or the drainage for these wells.

6 Q Have you reviewed Intervenor's Exhibits 1 through
7 4?

8 A I did look at them, yes.

9 Q Do you have an opinion as to the effect of an order
10 of forced pooling in Section 3?

11 A Yes, I do. The -- I believe that it would hurt our
12 com -- it would hurt as far as correlative rights are con-
13 cerned insofar as if we are force pooled, that would give us
14 fifty percent of a well in Section 3 spaced on 640 acres
15 and we would be offset by right now two, and possibly four,
16 wells spaced on 320-acre spacing, two of which would be
17 operated by Belco. Furthermore, this Catclaw Draw is a pro-
18 rated field and we would be subject to proration on this
19 640-acre whereas the offsetting wells would not be, or could
20 produce at capacity. Also, on 640 acres you have a differ-
21 ent standard location than on 320 and if we drill a well on
22 320, I think we could protect our correlative rights better
23 insofar as we could be closer to what I think is the major
24 producing area. And I think the main question is the fact
25 that we would -- if we're force pooled, we would be left with

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1 50 percent of a well in the west half of Section 3, whereas
2 if we drilled it on 320's we'd have 100 percent of that well,
3 and we have no objections to Belco drilling on the east half.

4 MR. CAMPBELL: Your Honor -- I mean Mr. Examiner,
5 that's all the questions that I have of Mr. Schroeder.

6 MR. NUTTER: Are there any questions of Mr. Schroeder?

7 MR. KELLAHIN: If the Examiner please.

8
9 CROSS EXAMINATION

10 BY MR. KELLAHIN:

11 Q Mr. Schroeder, I fail to understand your argument
12 that your correlative rights would be damaged. Let me ask
13 you, if the well is drilled on the west half and you make
14 the engineering calculations to determine that the well on
15 the west half in fact is draining no more than 320 acres.

16 A Yes.

17 Q Then we could simply down-space the acreage and you
18 would own the entire well, would you not?

19 A Well, the way I understand it, the forced pooling
20 would -- would cause a creation of -- of a unit, which we
21 would only have fifty percent of that way, is my understanding
22 of it.

23 Q Initially, presuming that the well in fact can
24 drain 640 acres, and if it cannot, then it could in fact be
25 down-spaced to 320 in which you would own the entire well,

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1 and conversely, if the well on the west half is capable of
2 draining 640 acres, then it ought to be included in the Cat-
3 claw Draw and spaced, in fact, on 640.

4 A. Would you repeat that?

5 Q. Yes, sir.

6 A. I'm sorry.

7 Q. The point is, if the well is drilled on your acreage

8 A. Yes.

9 Q. -- that is your half --

10 A. Right.

11 Q. -- Belco would participate only so far as the Mor-
12 row is concerned, is that correct?

13 A. If -- if we were force pooled and the well was
14 drilled on the west half, we -- well, one thing you're leaving
15 out is the penalties involved. We would just as soon stand
16 that risk ourselves as to pay them 200 percent.

17 Q. We'll be happy to join you in the drilling of a
18 well spaced on 640 acres, if that's a problem for you.

19 A. We want to drill the well on 320-acre spacing
20 consisting of the west half of Section 3.

21 Q. I understand, so you'll have 100 percent owner-
22 ship of the well, but my question is, that is not infringing
23 upon your correlative rights if the Commission determined
24 that 640 acres is the appropriate spacing.

25 A. Uh-huh.

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1 Q And that this well, in fact, will drain 640 acres,
2 then there's no reason to have it as a 320; that's what I'm
3 saying; that once the well is drilled and production is
4 determined, at that point you will know whether your correla-
5 tive rights are to be damaged, at that point we can come in
6 and ask for down-spacing and get 320's, could you not?

7 A But in what you're presenting, you're saying that
8 in that situation you would turn the well back over to us?

9 Q Well, that's right, if it can only drain 320 acres.

10 A But then you will -- there's a -- I think there's
11 a certain overriding effect, is that if we're force pooled
12 on 640-acre, I think we'll be in a defensive position as far
13 as proving 320 or, vice versa, 640 acres. Take a look at the
14 Catclaw, they've been fighting this same -- same thing for
15 the last -- for at least three different hearings and still
16 haven't made a determination as to whether they're draining
17 640 or 320. My personal feeling is some wells are, some wells
18 aren't. In fact, and I think it all is determined on the
19 basis as to the various sand lenses encountered. We think
20 we have a better chance of encountering productive sand lenses
21 on the west half. We think that the risk of encountering
22 due to the dry hole situation, is less on --

23 Q Well, Mr. Schroeder, there's no disagreement about
24 where the well ought to be located.

25 A Right.

1 Q My disagreement is, I don't want to drill two wells
2 where one will do.

3 MR. NUTTER: Mr. Kellahin, let me be sure I under-
4 stand the question you're asking Mr. Schroeder there.

5 You were saying if the well were not completed as
6 a Morrow well, then it would revert to T.P., is that correct?
7 Say, for instance, if the Morrow were dry and it was com-
8 pleted in the Strawn Formation.

9 MR. KELLAHIN: That's the way I understood Mr.
10 Nering's testimony, is that if there is production in other
11 upper horizons, that is, you know, in absence of an agreement,
12 which we do not have, we have drilled them a free well on
13 the west half.

14 MR. NUTTER: Or in the absence of Belco then filing
15 for 640-acre spacing in the Strawn.

16 MR. KELLAHIN: Yes.

17 A Yes. But I still believe that the proper course
18 of action is to drill the Morrow on 320 acres and the wells
19 that we've drilled, based on pressure drawdown tests, it
20 does not appear that we're getting any place close to 320,
21 much less 640. The evidence in the pressure work that I've
22 done up in the Catclaw indicates that out of -- well, you
23 throw out the five edge wells -- the five wells, which I call
24 edge wells, which are going to produce less than a Bcf, you
25 are left with twelve wells remaining, and out of those twelve

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1 wells only two are calculated with drainages of 640 acres.

2 MR. NUTTER: Well, now, Mr. Schroeder, let me ask
3 you this. Why did you file an application to drill with the
4 USGS dedicating only the west half when you were in the Cat-
5 claw Draw, which is a 640-acre field?

6 A Primarily because we were not -- we were not well
7 enough informed, to be honest about it. We were -- we ordi-
8 narily do not research all the oil orders. The fact that
9 there was no production on Section 3, we had arbitrarily
10 decided since there was no production on Section 3, that it
11 was not assigned this.

12 MR. NUTTER: That it wasn't in any pool?

13 A That it wasn't in any pool and therefore, and we
14 were going to be drilling a well, which at that time this
15 well in Section 34 had not been drilled, we would be -- our
16 proration unit would be actually closer to the Revelation,
17 which was on 320, than it would have been to Catclaw Draw.

18 MR. NUTTER: When was it that that well in 34 was
19 completed?

20 MR. KEYES: August the 10th, this year.

21 MR. NUTTER: August the 10th?

22 MR. KEYES: Yes, sir.

23 MR. NUTTER: Was that the date it was P and A or
24 was that --

25 MR. KEYES: Yeah, that's the date that -- the P and A

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1 date, yes, sir.

2 MR. NUTTER: Do you know, Mr. Keyes, when the Cat-
 3 claw Draw 10 in 27 was completed?

4 MR. KEYES: The Number 10?

5 MR. NUTTER: Uh-huh.

6 MR. KEYES: Yes, sir, October -- October 18th, 1974.

7 MR. NUTTER: Was that after the Commission extended
 8 the pool to include Section 27, 34, and 3?

9 MR. KEYES: I think it was just about that time
 10 that you all had your hearing. This well may have been
 11 drilling at the time your hearings were -- in fact, I think
 12 yes --

13 MR. CAMPBELL: Mr. Examiner, I can clarify that
 14 for you.

15 MR. NUTTER: If you would, Mr. Campbell.

16 MR. CAMPBELL: Section 3, 27, and 34 was included
 17 in the Catclaw by Order issued October 9th, 1974. The hearings
 18 on those inclusions began October 2nd, 1974.

19 MR. NUTTER: And the well was completed 10-18, Mr.
 20 Keyes, so --

21 MR. KEYES: The well had been drilling.

22 MR. NUTTER: That dry hole was completed after the
 23 pool was extended in that hearing, and the one in 34 was
 24 completed after the pool was extended.

25 Are there any further questions of Mr. Schroeder?

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1 He may be excused. Do you have anything -- does anyone have
2 anything now they wish to offer in this case? Do you wish to
3 make closing statements or final arguments?

4 MR. CAMPBELL: Mr. Examiner, if you would like, I
5 have a copy of the application for permission to drill filed
6 with the USGS and I'll be happy to introduce it as an Inter-
7 venor's Exhibit; if you'll take our word for it, we'll just
8 keep it.

9 MR. NUTTER: It's been mentioned, the date of the
10 thing has been mentioned, and so forth. I think it would be
11 appropriate to be in the record.

12 MR. CAMPBELL: Oh, in closing I would like to intro-
13 duce the Intervenor's Exhibits 1 through 5 that we've --

14 MR. NUTTER: And this will be 5 here, is that cor-
15 rect?

16 MR. CAMPBELL: Yes, sir.

17 MR. NUTTER: T.P. Exhibits 1 through 5 will be ad-
18 mitted in evidence. Are there any statements?

19 MR. NERING: I'd like to make a request. I'd like
20 to request that Belco be issued a copy of the Federal appli-
21 cation.

22 MR. KELLAHIN: Could we have a copy?

23 MR. NUTTER: Of Exhibit Number 5?

24 MR. KELLAHIN: Isn't that it? Let me see what that
25 is.

1 MR. CAMPBELL: Mr. Examiner, I would only request
2 in closing that Texas Pacific would request an order of the
3 Commission denying Belco's application for forced pooling in
4 this case, or in the alternative request the Commission delay
5 issuing a decision on Belco's application until such time as
6 it has heard such evidence as Texas Pacific would submit in
7 support of its application for a rededication of that acreage
8 in Section 3 into the Revelation Pool.

9 MR. NUTTER: Mr. Campbell, you may rest assured
10 there won't be any order issued in this case till after we've
11 heard the other case, and the other case is scheduled for
12 October the 12th. That is scheduled to be heard by another
13 Examiner; however, I'll make every effort to hear this parti-
14 cular case, because I think the two of them are closely enough
15 related that they should be heard by the same person.

16 MR. CAMPBELL: All right, we would appreciate it.

17 MR. NUTTER: With that, we'll take Case Number 6046
18 under advisement.

19 (Hearing concluded.)
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sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

REPORTER'S CERTIFICATE

1
2 I, SALLY WALTON BOYD, a Certified Shorthand Reporter,
3 DO HEREBY CERTIFY that the foregoing and attached Transcript
4 of Hearing before the New Mexico Oil Conservation Commission
5 was reported by me, and the same is a true and correct record
6 of the said proceedings to the best of my knowledge, skill,
7 and ability.

8
9 Sally Walton Boyd
10 Sally Walton Boyd, C. S. R.

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sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

...proceeding is
...in
...6046
...9/28... 1977...
...Examined
New Mexico Oil Conservation Commission

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 6046
Order No. R-5598

APPLICATION OF BELCO PETROLEUM
CORPORATION FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28, 1977, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 27th day of December, 1977, the Commission, a quorum being present, 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 Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Belco Petroleum Corporation, seeks an order from the Commission pooling all mineral interests in the Morrow formation underlying all of Section 3, Township 22 South, Range 25 East, NMPM, Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico.

(3) That by Order No. R-5599, entered by the Commission in Case No. 6067 on this date, the Commission contracted the Catclaw Draw Morrow Gas Pool by the deletion therefrom of all of Section 3, Township 22 South, Range 25 East, NMPM, Eddy County, New Mexico.

(4) That although the aforesaid Section 3 is within one mile of the horizontal boundaries of the Catclaw Draw-Morrow Gas Pool as contracted, the special pool rules for said pool, including the provision for 640-acre spacing and proration units, do not apply outside the boundaries of said pool.

(5) That inasmuch as the aforesaid pool rules, including the provision for 640-acre spacing and proration units, no longer apply to the aforesaid Section 3, the question of pooling all mineral interests in the Morrow formation underlying said Section 3 becomes moot, and the instant case should be dismissed.

-2-

Case No. 6046

Order No. R-5598

IT IS THEREFORE ORDERED:

- (1) That Case No. 6046 is hereby dismissed.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

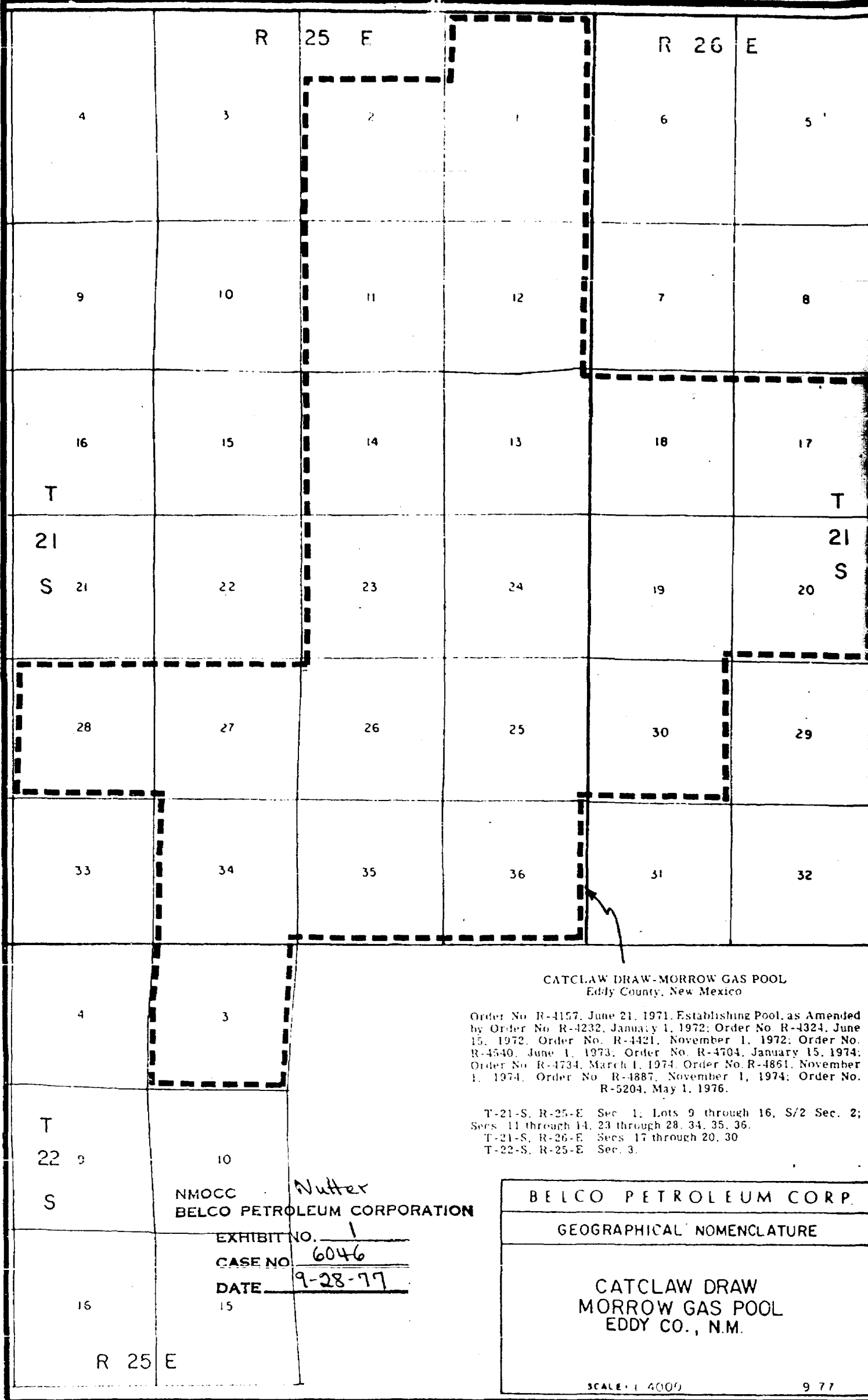
PHIL R. LUCERO, Chairman


Emery C. Arnold
EMERY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

jr/



NMOCB
BELCO PETROLEUM CORPORATION

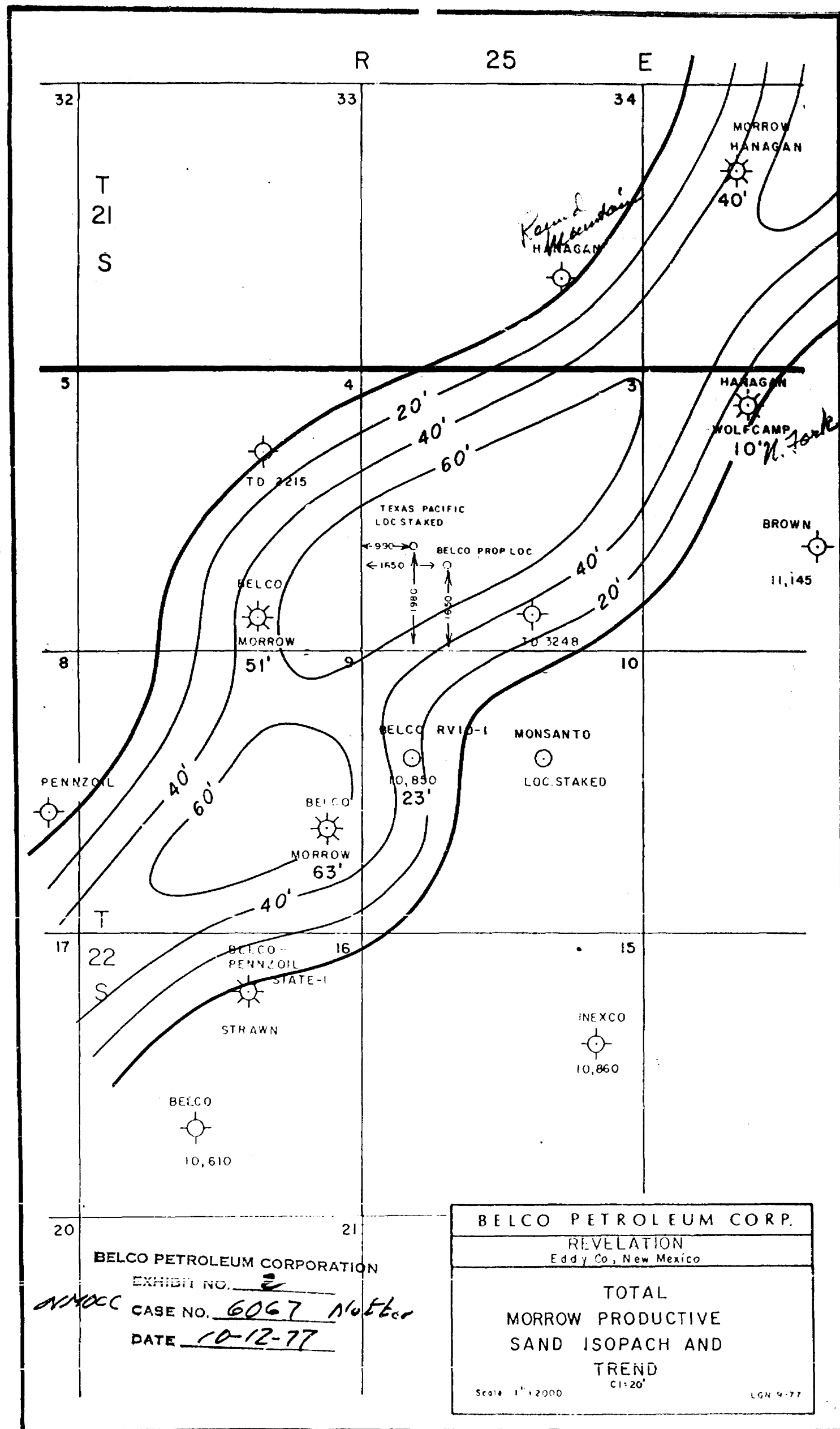
EXHIBIT NO. 1

CASE NO. 6046

DATE 9-28-77

15

R 25 E



BELCO PETROLEUM CORPORATION
 EXHIBIT NO. 2
 CASE NO. 6067 *Not for*
 DATE 10-12-77



Union Texas Petroleum Division
1300 Wico Building
Midland, Texas 79701

September 21, 1977

Belco Petroleum Corporation
411 Petroleum Building
Midland, Texas 79701

RE: NM-12254
Proposed Farmout
Hackberry Hills Area
Eddy County, New Mexico

Gentlemen:

This is to advise that subject to our management's final approval we will farmout our interest to you under the E/2 of Section 3, T-22-S, R-25-E, Eddy County, New Mexico subject to the following general terms:

- (1) Within 90 days from agreement date you will commence the drilling of a 10,600' Morrow test at a legal location in the SW/4 of Section 3, T-22-S, R-25-E.
- (2) The proposed well will be drilled on a working interest unit and/or proration unit composed of all of Section 3, T-22-S, R-25-E, Eddy County, New Mexico.
- (3) Upon completion of the well as a commercial producer of oil and/or gas we will assign to you all of our proportionate interest in the well and proration unit surrounding the well as to all rights from the surface down to the base of the deepest producing formation in the well.
- (4) We shall reserve a proportionately reduced 1/16 X 8/8 overriding royalty interest under the well and proration unit surrounding the well with the option to convert the override to our proportionate part of a 50% working interest after payout.
- (5) We will reserve all rights below the base of the deepest producing formation in the earning well and the preferential right to purchase the oil and/or gas attributable to the interest you may earn from Union Texas Petroleum.

This letter is not intended to be a commitment between the parties. It is however an expression of the general terms under which we desire to farmout.

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 3
CASE NO. 6046
DATE 9-28-77

DFD/dn

Yours very truly,

UNION TEXAS PETROLEUM, a Division
of Allied Chemical Corporation

Don F. Dow
Don F. Dow
District Landman

April 30, 1975

Texas Pacific Oil Co., Inc.
P. O. Box No. 4067
Midland, Texas

Attention: J. D. Larremore

Re: Revelation Prospect
Eddy County, New Mexico

Gentlemen:

According to our information, Texas Pacific owns leases covering the W/2 Section 3, T22S, R25E. Belco has recently acquired acreage in Sections 10, 11 and 15 of T22S, R25E.

We are interested in drilling a Morrow test in this area in the very near future and would appreciate your advising us whether Texas Pacific would make its acreage available on a farmout basis.

If a suitable farmout arrangement can be negotiated, we would be able to drill this area in the very near future. Thank you for your cooperation and anticipated prompt reply to this request.

Yours very truly,

BELCO PETROLEUM CORPORATION

J. A. Patterson
District Landman

JAP/MW

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 4

CASE NO. 6046

DATE 9-28-77

pg. 1

June 9, 1975

Texas Pacific Oil Company, Inc.
P. O. Box No. 4067
Midland, Texas
Attention: Jack Larremore

Gulf Oil Company
P. O. Box 1150
Midland, Texas
Attention: R. E. Griffith

Union Texas Petroleum,
a Division of Allied Chemical
1300 Wilco Building
Midland, Texas
Attention: Don F. Dow

Pennzoil United, Inc.
P. O. Box 1828
Midland, Texas
Attention: James A. Davidson

Monsanto Oil Company
101 North Marienfeld
Midland, Texas

Re: Revelation Prospect
Eddy County, New Mexico

Gentlemen:

Belco Petroleum Corporation proposes the formation of a three-section Working Interest Unit covering Sections 3, 9 and 10 of T22S, R25E, Eddy County, New Mexico, for the drilling of a 10,500 ft. Morrow test in the NE/4 Section 3.

According to my information, which is reflected on the attached land plat, the approximate ownership would be as follows:

<u>Company</u>	<u>Acres</u>	<u>Percentage</u>
Allied Chemical	640	33.3333
Belco Petroleum	320	16.6667
Texas Pacific	320	16.6667
Monsanto	320	16.6667
Gulf Oil	240	12.5000
Pennzoil	80	4.1666
	1920	100.0000%

Although Belco is not the majority owner in this proposed unit, we would be pleased to serve as Operator. However, we would be agreeable to any Operator selected by a majority of the unit participants. If your companies are interested in this proposal, we would appreciate hearing from you at your earliest convenience.

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

Yours very truly,

JAP/MW

EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

J. A. Patterson

Pg. 2

October 5, 1976

Texas Pacific Oil Company, Inc.
P. O. Box 4067
Midland, Texas 79701

Attn: Mr. Jack D. Larremore
District Landman

Re: Farmout Request
Revelation Area
Eddy County, New Mexico

Gentlemen:

Belco Petroleum Corporation respectfully request a farmout of your acreage being described as the W/2 Section 3, T-22-S, R-25-E, Eddy County, New Mexico based on the following terms and conditions:

1. Belco to commence the drilling of a Morrow test (approximately 10,500') at a location of our choice, within said Section 3, with the option to drill to the Devonian.
2. Said test to be commenced on or before 120 days from date of the execution of a formal farmout.
3. Texas Pacific to grant said farmout and retain an ORRI sufficient as to deliver to Belco no less than a 80% NRI lease with the option to convert said retained ORRI to a 40% back-in after payout.

If the above basic terms and conditions are satisfactory to you and your company, please prepare the necessary farmout agreement at your earliest convenience.

NutTex
NMOCC
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

MW/sam

Yours very truly,

BELCO PETROLEUM CORPORATION

Mary Ward
Landman

pg. 3

TEXAS PACIFIC OIL COMPANY, INC.

REGIONAL OFFICE
MIDLAND, TEXAS 79701

P.O. BOX 4067
1500 WEST WALL STREET

TEL. 915-684-3304
TWX. 910-693-3324

November 16, 1976

RECEIVED

NOV 19 1976

MIDLAND OFFICE

BELCO PETROLEUM CORPORATION
411 Petroleum Building
204 West Texas Street
Midland, Texas 79701

RE: Farmout Request
Your Revelation Area
Eddy County, New Mexico
TPOC Hackberry Area
TPOC Lease No. 70988-1

Gentlemen:

After careful evaluation of the above referenced area, we regret to advise you that we will not be able to grant your request for a farmout in the W/2 of Section 3-22S-25E, Eddy County, New Mexico.

We do appreciate your offer, and your interest in this area.

Yours very truly,

TEXAS PACIFIC OIL COMPANY, INC.

Jack D. Larremore
Jack D. Larremore
Regional Land Manager

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

Pg. 4

Belco Petroleum Corporation

August 18, 1977

Belco

Texas Pacific Oil Co., Inc.
P. O. Box 4067
Midland, Texas 79701

Attn: J. D. Larremore

Re: Revelation Prospect
Sec. 3, T22S, R25E,
Eddy Co., New Mexico

Gentlemen:

Please be advised that Belco Petroleum Corporation has secured a farmout from Allied Chemical covering their E/2 of the captioned section. As you are aware, the W/2 of Section 3 is owned by Texas Pacific. According to the New Mexico Oil Conservation Commission Field Rules, Section 3 is included in the Catclaw Draw Field and is spaced 640 acres for Morrow gas.

By this letter, Belco Petroleum Corporation, as operator, proposes drilling a 10,600' Morrow test to be located 1650 feet FS&WL's of Section 3. Our estimated completed well cost is \$605,000. We will forward to you an AFE for this expenditure as soon as it is available. If you want to join in this unit, we will forward the necessary operating agreement.

If, however, you should desire to farmout your acreage in the W/2 of Section 3, we would be pleased to take it on a 1/2 back-in basis.

We plan to commence this well in October, 1977, depending upon rig availability. Therefore, your prompt consideration and reply will be greatly appreciated.

Yours very truly,

BELCO PETROLEUM CORPORATION

Mary Ward
Landman

MW:sls

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

Pg. 5

411 Petroleum Building
204 W. Texas
Midland, Texas 79701
Telephone (915) 683-6306

Belco Petroleum Corporation

September 8, 1977

Belco

Texas Pacific Oil Company
P. O. Box 4067
Midland, Texas 79701

Attn: J.D. Larremore

Re: Revelation Prospect
Section 3, T22S, R25E
Eddy County, New Mexico

Gentlemen:

Please be advised that on August 18, 1977 Belco sent you a letter requesting to form a drilling unit covering Section 3 as captioned. The working interest to be 50%-Belco and 50%-Texas Pacific.

Since that letter was mailed, it is our understanding that Texas Pacific intends to drill in the W/2 Section 3 on a 320 acre proration unit. Since Section 3 is under 640 acre Morrow spacing and since you choose not to participate in our proposed unit, we have filed for a Force Pool Application which is set for hearing on September 28, 1977.

We would be happy to continue negotiations to form our proposed 640 acre unit.

Yours very truly,

BELCO PETROLEUM CORPORATION

Mary Ward
Landman

MW/cam
Enc.

Nutter
NMOCC
BELCO PETROLEUM CORPORATION
EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

Pg. 6

TEXAS PACIFIC OIL COMPANY, INC.

REGIONAL OFFICE
MIDLAND, TEXAS 79701

P. O. BOX 4047
1509 WEST WALL STREET

TEL. 915-624-5504
TWX. 915-895-8394

September 8, 1977

BELCO PETROLEUM CORPORATION
411 Petroleum Building
204 West Texas
Midland, Texas 79701

ATTENTION: Ms. Mary Ward

RE: Revelation Prospect
Section 3, T-22S, R-25E
Eddy County, New Mexico
TPOC Hackberry Prospect
TPOC Lease No. 70988-1

Gentlemen:

In response to your letter of August 18, 1977, we wish to advise that activity was commenced several weeks ago for the staking of the Texas Pacific No. 1 Hackberry Federal, to be located 1980' FSL and 990' FWL of Section 3-22S-25E, Eddy County, New Mexico.

This well has been filed as a Revelation Field well as it is offset to the west and south of two of your wells. As you well know, the Revelation Field is based on a 320-acre proration unit; and because of this it will not be possible for us to join with you in a 640-acre spaced unit. We might add that we have begun proceedings for despacing Section 3 out of the Catclaw Draw Field into the Revelation Field.

We appreciate the opportunity you have afforded us, however, we feel it is in our best interests to drill this well 100% Texas Pacific on its fully owned lease covering the W/2 of Section 3.

Yours very truly,

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 4
CASE NO. 6046
DATE 9-28-77

JDL/lrp

TEXAS PACIFIC OIL COMPANY, INC.

Jack D. Larremore
Jack D. Larremore
Regional Land Manager

pg. 7

CHRONOLOGY

RE: Belco-Texas Pacific

Concerning Section 3, T-22-S, R-25-E, Eddy County,
New Mexico

4/30/75 Belco requests a farmout from Texas Pacific; no written reply.

6/9/75 Belco requests that Texas Pacific join with others in forming a three-section working interest unit inclusive of Sections 3, 9, and 10.

7 - 76 to current Belco proceeds alone to drill one discovery well, and one development well in the above-described proposed working interest unit.

10/5/76 Belco again requests farmout from Texas Pacific.

11/16/76 Texas Pacific advises Belco by letter that Texas Pacific will not farm out.

6/13/77 Texas Pacific stakes an irregular Catclaw Draw Morrow location in Section 3.

8/17/77 Belco requests permission from the USGS (Federal lease) to stake a regular Catclaw Draw Morrow location in Section 3.

8/18/77 Belco advises Texas Pacific by letter that Catclaw Draw Morrow 640-acre spacing applies to Section 3, and requests that Texas Pacific join.

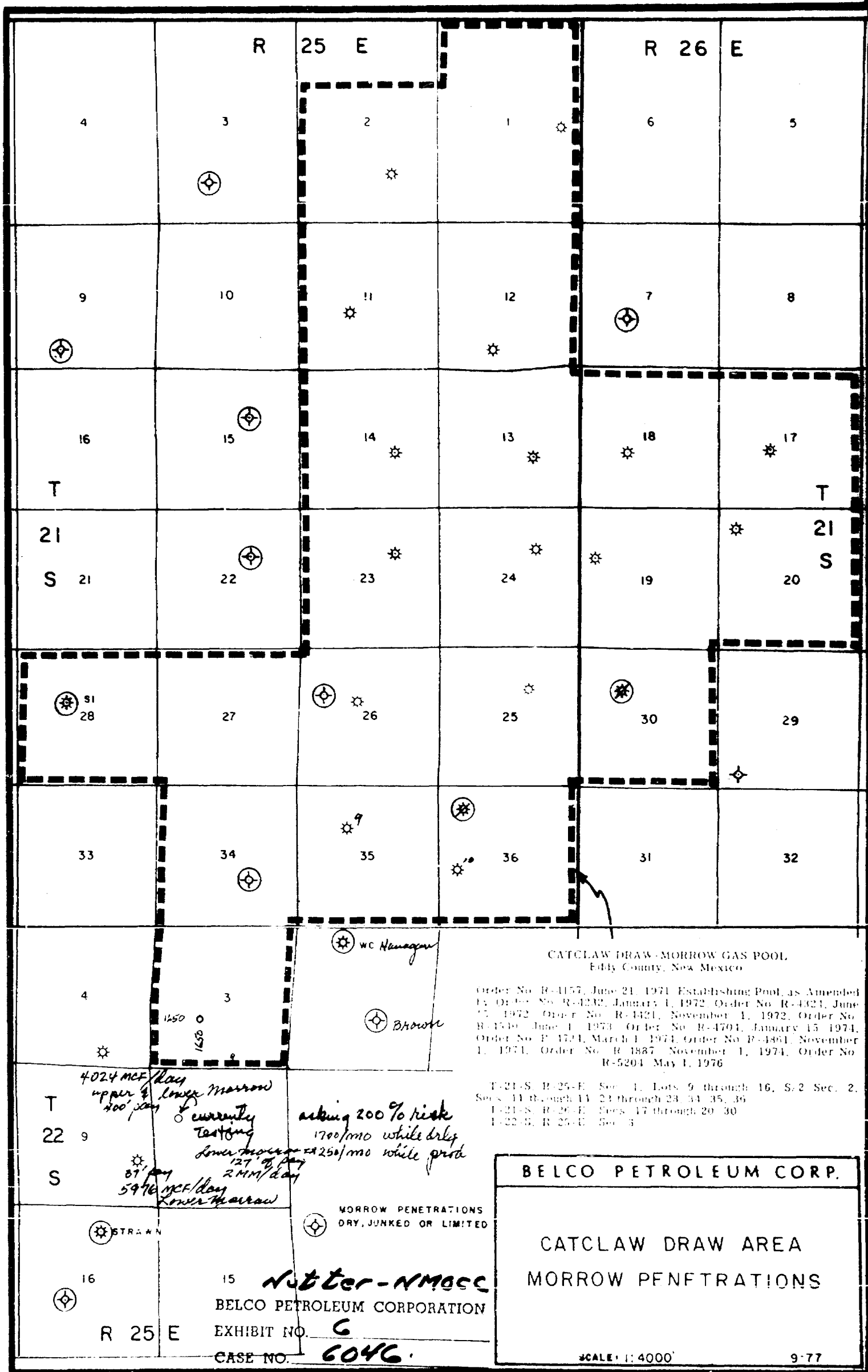
8/29/77 Texas Pacific files Application with USGS for 320-acre spacing dedication with an irregular Catclaw Draw Morrow location.

9/8/77 Belco advises Texas Pacific by letter that Belco has made Application to force pool Section 3 for Catclaw Draw Morrow.

9/8/77 Texas Pacific advises Belco by letter of staked location in Section 3 and preparations to withdraw acreage dedicated to the Catclaw Draw Morrow Pool.

NMOCC *Nutter*
BELCO PETROLEUM CORPORATION

EXHIBIT NO. 5
CASE NO. 6046
DATE 9-28-77



19	Revelation	New Mexico	Eddy		
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NO MORE THAN NINE DIGITS PER COLUMN/WHOLE DOLLARS ONLY

50	CHG	PROPERTY NO.	CSG. PT. COST	COMPL. COST	TOTAL COST
20		7435005	730	731	
18 20		INTANGIBLE EXPENSE	24	32	32
		Rig Expenditure			
		Move In & Out			\$ 10,000
		Drilling			
		Daywork 42 days @ \$2,800/day			\$117,000
		Completion/W.O. Unit 10 days @ \$1000/day			10,000
218		Total Rig Expenditure	\$127,600	\$ 10,000	\$137,600
612		Location - Roads, Row & Damages	10,000	3,000	13,000
204		Contract Professional Services	15,000	6,000	21,000
210		Misc. Contract Labor	2,500	5,000	7,500
418		Mud & Additives	20,000	1,000	21,000
418		Mud Logging	4,000	-	4,000
418		Bits	20,000	500	20,500
228		Tubular Testing/Inspection	-	4,000	4,000
230		CSG/TBG Crews/Tools	4,800	3,000	7,800
422		Float Eq., Cent & Scratchers	2,800	2,000	4,800
420		Cement & Additives	15,000	8,000	23,000
236		Pump Truck/Skid Unit Serv. & Cmt. Tools	5,000	2,000	7,000
222		Coring & Analysis	-	-	-
224		Elec. Line - Logs, Perf, Production, Etc.	11,000	8,000	19,000
226		Well Testing - DST, Wireline, Etc.	-	2,000	2,000
512		Eq. Rntls. - Surface/Downhole	11,000	2,000	13,000
950		Directional Drilling Expense	-	-	-
234		Transportation - Land - Marine	20,000	5,000	25,000
410		Fuel, Power & Water	9,000	2,000	11,000
930		Well Stimulation	-	10,000	10,000
808		Insurance & Bonds	-	-	-
920		Misc. & Contingency	18,300	7,500	25,800
		TOTAL INTANGIBLE EXPENSE	\$296,000	\$ 81,000	\$377,000

50	CHG	TANGIBLE EXPENSE	CSG. PT. COST	COMPL. COST	TOTAL COST
20			732	736	
18 20		CSG. & LINER			
		Drive			
		Cond.			
		Surf. 300 Ft. 13-3/8" O.D. @ \$ 14.56 /Ft. = \$ 4,400			
		Intr. 2300 Ft. 9-5/8" O.D. @ \$ 10.55 /Ft. = 24,300			
		Prod. 10600 Ft. 5-1/2" O.D. @ \$ 6.68 /Ft. = 70,800			
		Liner			
426		TOTAL	\$ 28,700	\$ 70,800	\$ 99,500
432		TUBING 10500 Ft. 2-3/8" O.D. @ \$ 2.65 /Ft. = 27,800	-	27,800	27,800
430		WELLHEAD EQUIPT.	6,300	9,400	15,700
438		WELL PROD. EQUIPT. SURFACE	-	5,000	5,000
440		WELL PROD. EQUIPT. DOWNHOLE	-	7,000	7,000
442		PROD. FACILITIES TANKS, EQUIPT. & LINES	-	20,000	20,000
450		MARINE PLATFORMS	-	-	-
452		OFFSHORE PROD. FACILITIES	-	-	-
		TOTAL TANGIBLE EXPENSE	\$ 35,000	\$140,000	\$175,000
		TOTAL WELL COST	\$331,000	\$221,000	\$552,000

this is the AFE
for the well in
Section 10

Wutter - NMOC
BELCO PETROLEUM CORPORATION
EXHIBIT NO. 7
CASE NO. 6046
DATE 7-28-77

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971).

FOR MORE INFORMATION, CALL 1-800-4-A-FLY OR PLUG BACK

PUTTING BACK

1. The first group of people who are interested in the results of the study are the researchers themselves. They want to know how well the study was conducted and whether the results are reliable and valid.

19. $\frac{1}{2} \log \frac{1}{2} = -\frac{1}{2} \log 2 = -\frac{1}{2} \log 2^1 = -\frac{1}{2} \cdot 1 = -\frac{1}{2}$

* Includes or with, if appropriate, in clearly defined accordance with any state requirements.

[illegible]

References

W. 100-150000 IN AMILES AND DEVISION FROM SEQUESTED OR LOST OFFICE.

7 miles west of Carlsbad, New Mexico

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

Doc. 64205-210-5184,025,7

4. 000 1612 000 21 085 1183 114.

• When to use rest drug, and how, if any.

14. FOR CANCELLATION PURPOSES ONLY

IN 1968, WHEN THE 1967-68 FISCAL YEAR WAS COMPLETED, THE AGENCY WAS IN THE RED IN THIS LINE OF:

THE UNIVERSITY OF TEXAS AT AUSTIN

4. **INVENTIONS** (Show whether DF, RT, GK, etc.)

3635.5 CR

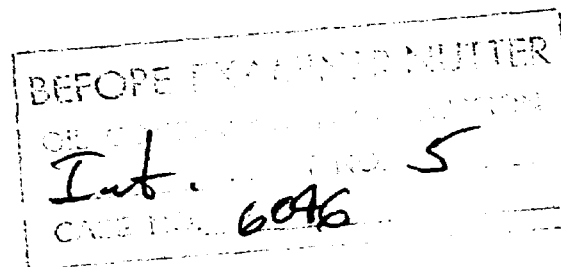
24

PROPOSED CASING AND CEMENTING PROGRAM

[illegible]

SEE ATTACHED

1. Development Plan for Surface Use
2. Drilling Procedure
3. Casing and Cementing Program
4. Mud and Logging Program
5. B.O.P. Schematic
6. Archaeological Clearance Report



17 of given formation, ranges to be drilled. If proposal is to deepen or plug back, give data on present productive zone and proposed new productive
18 of proposal is to drill to deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout
19 for program, if any.

Method

FILE Drilling Administrative SUPDATE 2-18-77

1. *Phragmites australis* (Cav.) Trin. ex Steud.

1980

872 10.2 11.4 12.6

4.2.3. *Effect of the type of the substrate on the adsorption of Cu(II) and Pb(II)*

136

1047

See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Superseded C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

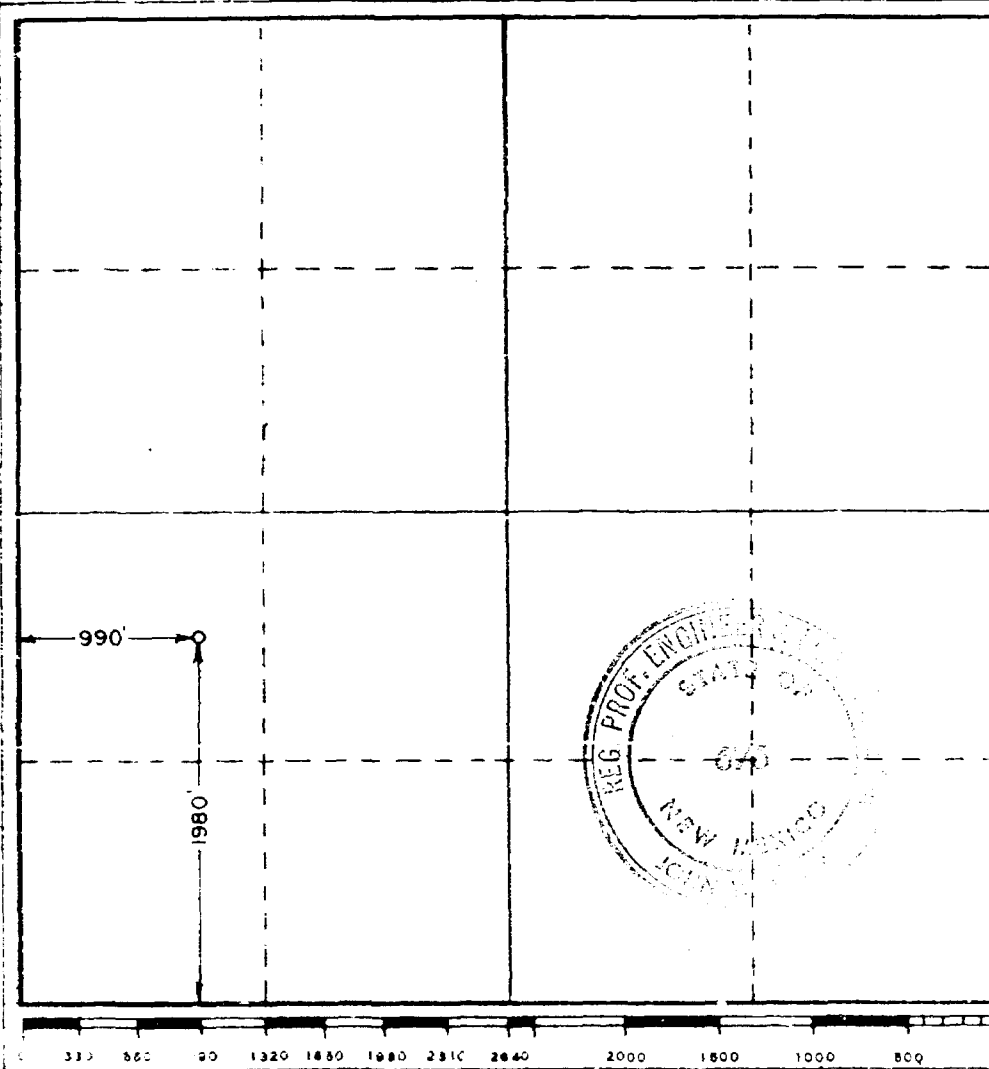
Operator Texas Pacific Oil Co.		Lease Hackberry Fed.		Well No. 1
Section L	Section 3	Township 22 South	Range 25 East	County Eddy
2. Well location relative to Section boundaries: 990 feet from the West line and 1980 feet from the South line.				
Producing Formations Morrow		Producing Formations Revelation		Wellbore Area (sq. ft.) 320 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
T. M. Matlock
Position
Drilling Administrative Supervisor
Company
Texas Pacific Oil Co., Inc.
Date
August 16, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date surveyed
June 13, 1977
Registered Professional Engineer
and State Surveyor

John W. West
Signature
676

[illegible]

T
22
S

EXHIBIT "E"
TEXAS PACIFIC OIL CO., INC.
HACKBERRY FEDERAL #1
Sec. 3, T-22-S, R-25-E
EDDY COUNTY, NEW MEXICO

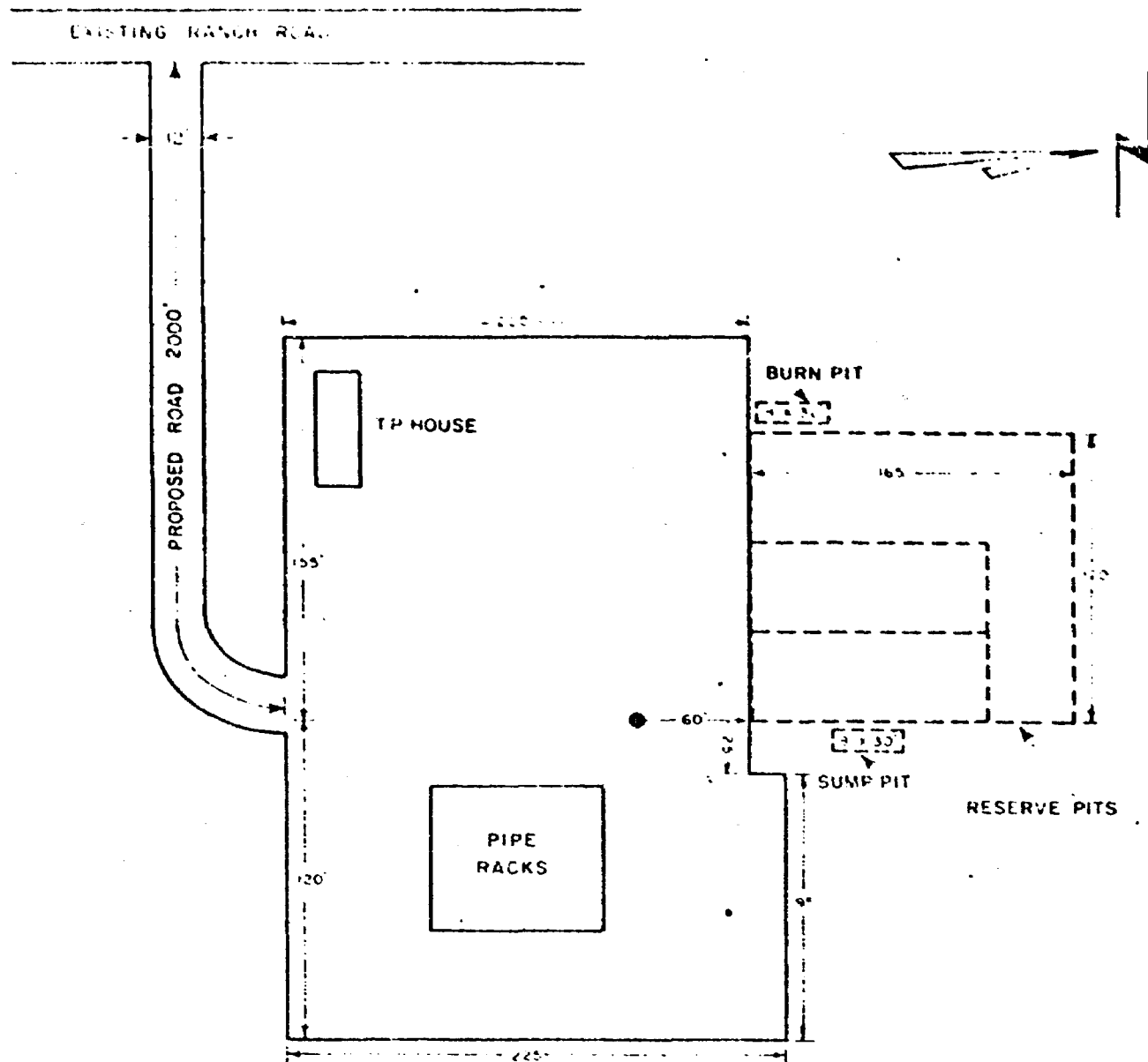
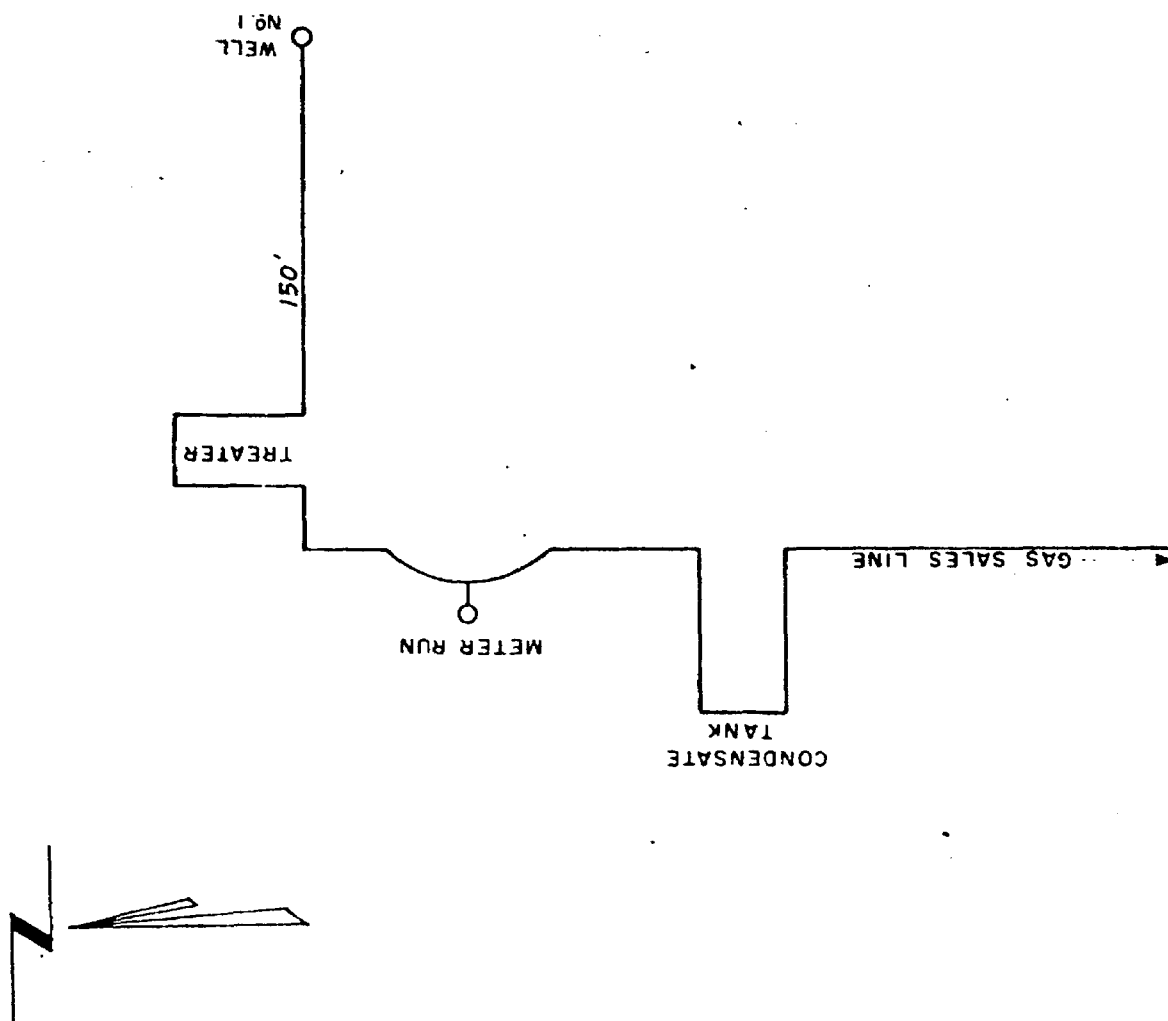


Exhibit "B"

TEXAS PACIFIC OIL COMPANY, INC.
 TREATING AND SALES FACILITIES
 HACKBERRY FEDERAL WELL N2.1

TEXAS PACIFIC OIL COMPANY, INC.
TREATING AND SALES FACILITIES
HACKBERRY FEDERAL WELL NO. 1

Exhibit "C"



Archaeological Clearance Report

for

Texas-Pacific Oil Company

Hackberry Federal No. 1

by

Eduardo A. Mimiaga

Submitted by

Dr. J. Loring Haskell
Operations Director and
Principal Investigator
Agency of Conservation Archaeology
Eastern New Mexico University
Portales

15 July 1977

INTRODUCTION

An archaeological reconnaissance was completed recently by the Agency of Conservation Archaeology, Eastern New Mexico University, for Texas-Pacific Oil Company in Eddy County, New Mexico. The area will be impacted by the construction of a drill location and an access road. This project was completed under Federal Antiquities Permit No. 77-NM-021.

The project was administered by Mr. Bill Sweatt of Sweatt Construction Company, representative for Texas-Pacific Oil Company, and Dr. J. Loring Haskell, Operations Director and Principal Investigator, Agency of Conservation Archaeology, Eastern New Mexico University, Portales.

The reconnaissance was completed by Eduardo A. Mimiaga on 12 July 1977.

SURVEY TECHNIQUE

The archaeologist accomplished the survey by walking a zigzag pattern the length and breadth of the proposed access road and a series of zigzag transects across the length and breadth of the drill location. These techniques permitted optimal conditions for the examination of primary and secondary impact areas.

Proposed Access Road and Drill Locality for Texas-Pacific Oil Company Hackberry Federal No. 1

LOCATION

The proposed access right-of-way is 12 ft wide and extends 2000 ft from an existing road passing through:

NE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 4 and NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 3, T22S, R25E, NMPM, Eddy County, New Mexico (BLM)

The proposed drill location measures 400 ft by 400 ft and is located in:

NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 3, T22S, R25E, NMPM, Eddy County, New Mexico (BLM)

Map Reference: USGS West Carlsbad Quadrangle, 15 minute series.

TERRAIN

Local terrain consists of low rolling limestone hills with thin sandy soils containing limestone inclusions.

FLORISTICS

The local plant community consists of Larrea tridentata, Yucca elata, Opuntia spp., Rhus microphilia, Hilaria mutica, and Gutierrezia sarothrae.

CULTURAL RESOURCES

No cultural resources were recorded during this reconnaissance.

RECOMMENDATIONS

ACA recommends clearance for the proposed drill location and access right-of-way and suggests that construction proceed without modification of existing plans.

Multi-Point Surface Use and Operating Plan
Texas Pacific Oil Company, Inc.
Hackberry Federal Well No. 1
990' FW Line 1980' FSL, Section 3, T22S, R 25E
Eddy County, New Mexico

1. Existing Roads:

Exhibit "A" is a portion of the West Carlsbad Quadrangle Topographic Map showing the location of the proposed well as staked.

Directions to location: from downtown Carlsbad, New Mexico intersection of Lea and Canal Street proceed west on Lea Street, on truck by-pass, 3.0 miles to intersection of Jones Street and Happy Valley Road. Proceed west on Happy Valley Road 7.1 miles, turn right 1.1 miles on Belco Petroleum Lease Road, turn right on pasture road .3 miles. The new proposed lease road begins here, proceeding approximately 2000' East to the proposed location of Hackberry Federal #1. The new proposed road is staked and flagged.

2. Planned Access Roads:

The new road will be 12' wide, estimated 2000' in length and will be constructed of compacted Caliche 6" in depth and sloped from the center to each side with not more than a drop of 6 inches. The new road is labeled and color coded on Exhibit "A". There will be no major cuts or fills required.

3. Locations of existing wells:

Location of existing wells within a one mile radius see Exhibit "E".

4. Location of Existing and/or Proposed Facilities:

See Exhibit "C" which is a plat showing proposed treating and sales facilities. These facilities will be built on the existing pad with lines on surface. The well and facilities will be fenced with a catleguard entrance.

5. Location and type of water supply:

Fresh water will be secured for drilling, from an existing water well located in the SE/4 of NE/4 of Section 2, T-22-S, R-25-E. Water will be transported from well by surface pipe line to drilling location as shown on Exhibit "A".

6. Source of Construction material:

Caliche for the drilling pad and roads will be obtained from an existing pit located in NW/4 of SE/4, Section 11, Federal Land.

7. Methods of handling waste disposal:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the winds. Location of the trash pits will be shown on Exhibit "B".

8. Ancillary facilities:

- A. None required.

9. Well site layout:

- A. Exhibit "B" shows the relative locations and dimensions of the well pad, mud pit and trash pit.
- B. The reserve pit will be plastic lined.
- C. The pad and pit area has been staked and flagged.

10. Plans for restoration of the surface:

- A. After completion of drilling and completion operations, all equipment and material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave well site as aesthetically pleasing conditions as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with the Bureau of Land Management specifications.

11. Other information:

A. Topography - land surface slopes in westerly direction and consists of very poor soil mixed with clay and very rocky.

B. Vegetation consists of Cat Claw, scrub Cedar, Broom weed, Grease wood and sparce native grasses.

Wild life is typical of semi-arid desert land and includes quail, dove, rabbits, rodents, reptiles, coyotes and deer.

C. There are no rivers, streams, lakes or ponds in the area.

D. The nearest occupied dwelling is a ranch house approximately 3.5 miles SE of well site.

E. Impact on the environment will be kept to a minimum.

12. Lessee's or Operator's representatives:

Office Phone: 214-741-5933 and 915-684-5584

A. Sheldon Ward - Drilling Foreman.

B. Delmer Jones - Drilling Superintendent, Home 214-361-8001.

C. Tom Frizzell - Geologist - 915-684-5584, Home 915-694-7944.

13. Certification:

I hereby Certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Texas Pacific Oil Company, Inc. and its Contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.

7/25/77
Date

Delmer Jones
Delmer Jones

Drilling Superintendent

ATTACHMENT TO SURFACE USE PLAN

1. Geologic name of surface formation at well site is Permian Yates.
2. The estimated depth of fresh water is 155'. Oil is expected in the Delaware Formation at 2000'. No salt to be encountered.
3. New casing will be run in well.
4. No abnormal pressures, temperatures, or Hydrogen Sulfide are anticipated.
5. A cut of approximately 10' will be made on east side of drilling pad in order to level location.

TPOCI HACKBERRY FEDERAL #1

EDDY CO., NEW MEXICO

WELL PROGRAM
10,900' MORROWMechanical

1. Casing String Designs

<u>Size</u>	<u>Interval</u>	<u>Length</u>	<u>Description</u>	<u>Burst @ MW</u>	<u>Max. Tension</u>
20"	0-40'	40'	94# H-40 STC		
13-3/8"	0-350'	350'	48# H-40 STC	1340 @ 8.3	179,000
9-5/8"	0-200'	200'	36# K-55 BTC	1780 @ 8.3	148,000
	200'-2350'	2150'	32.3# H-40 STC		
5-1/2"	0-3300'	3300'	15.5# K-55 BTC	3830 @ 9.0	175,000
	3300'-7800'	4500'	15.5# K-55 STC		
	7800'-9000'	1200'	17# K-55 STC		
	9000'-10,900'	1900'	17# N-80 LTC		

2. Casing Mechanical Properties

<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Collapse</u>	<u>Burst</u>	<u>Tension</u>	<u>Torque</u>
20"	94#	H-40	STC	460	1190	323,000	
13-3/8"	48#	H-40	STC	660	1340	179,000	3220
9-5/8"	36#	K-55	BTC	1970	2770	423,000	5200
	32.3#	H-40	STC	1180	1780	141,000	2540
5-1/2"	15.5#	K-55	BTC	3431	3830	186,000	
	15.5#	K-55	STC	3431	3830	123,000	2220
	17#	K-55	STC	4000	4250	140,000	2520
	17#	N-80	LTC	5240	6180	193,000	3480

3. Cementing Accessories

<u>Casing</u>	<u>Description</u>
13-3/8"	Guide shoe, insert float, 2 centralizers - middle of bottom joints.
9-5/8"	Guide shoe, insert float, 5 centralizers - middle of bottom joint and body of next 4 joints.
5-1/2"	Downjet float shoe, float collar, 10 centralizers - middle of bottom joint and body of next 9 joints.

4. Cementation

<u>Casing</u>	<u>Cement Slurry</u>	<u>Fill & Excess</u>	<u>No. Sx.</u>	<u>Weight</u>	<u>Yield</u>
20"	Redi-mix				
13-3/8"	Class C w/2% CaCl	Surf + 100%	370	15ppg	1.324 ft ³ /sx
9-5/8"	Class C w/additives	Surf + 200%	500	15.1 ppg	1.326 ft ³ /sx
	per sx of:				
	.5% Component A				
	.25% Component B				
	10# Gilsonite				
	1.88# CaCl				
	.25# Flocel				

<u>Casing</u>	<u>Cement Slurry</u>	<u>Fill & Excess</u>	<u>No. Sx.</u>	<u>Weight</u>	<u>Yield</u>
9-5/8" cont.	Halliburton Lite Cement w/additives per sx of: 1.88# CaCl 5.0# Gilsonite .25# Flocel		955	12.7ppg	1.915 ft ³ /sx
	Class C w/1.88 CaCl per sx		515	15ppg	1.324 ft ³ /sx

Note: If cement fails to circulate, use the following slurry to pump down backside.

	Class C w/1.88# CaCl per sx		200	15ppg	1.324 ft ³ /sx
5-1/2"	Pump 1000 gal. mud flush to proceed cement. Class H w/additives 9000' + 40% per sx of: .5% CFR-2, 5# KCL		385	15.9ppg	1.202 ft ³ /sx

5. Casing Head

<u>Casing</u>	<u>Description</u>
13-3/8"	12" x 3000 psi slip-on casing head for 13-3/8" casing. Head will have one 2" flanged outlet equipped with one 2" x 2-1/16" x 3000 psi gate valve. One casing hanger for 9-5/8" casing
Casing Spool	12" - 3000 psi x 10" - 5000 psi casing spool. Spool will have one 2" studed side outlet equipped with one 2" x 2-1/16" x 5000 psi gate valve. One casing hanger for 5-1/2" casing.
Tubing Spool	10" - 5000 psi x 6" - 5000 psi tubing head spool Spool will have one 2" studed side outlet equipped with one 2" x 2-1/16" x 5000 psi gate valve. Spool will include wrap around tubing hanger.
Christmas Tree Assembly	6" - 5000psi x 2" - 5000 psi tubing hanger spool with coarse threads for use with screw-on tubing hanger. One tubing hanger complete with back pressure valve. Three 2" x 2-1/16" x 5000 psi gate valves. One 2-1/16" x 2-1/16" x 2-1/16" - 5000 psi studed tee. One 2-1/16" x 5000 psi flanged adjustable choke.

6. Mud Program

<u>Interval</u>	<u>Description</u>
0-350'	FW spud mud. 8.4 - 8.6 ppg. Vis 25-30. FL-NC. Add gel as needed.
350'-2350'	FW 8.4 - 9.0 ppg. Vis 25-30. FL-NC. Add gel as needed for hole cleaning. High probability of lost circulation starting anywhere from 500'-1000'. Should lost circulation be encountered mix one or two pills of lost circulation material. If returns are not regained, dry drill to casing point at 2350'.

2350'-9000' FW 8.4-9.0 ppg. Vis 25-30. FL-NC. Add gel as needed for hole cleaning.

9000'-10,000' FW system with additions of brine water to obtain 9.0-9.2 ppg MW. Vis 25-30. FL-NC. Wolfcamp formation should come in around 9000' and may require about 9.1 ppg brine water.

10,000'-10,900' Brine water with addition of polymer to increase viscosity and control water loss. 9.0-9.2 ppg. Vis 30-35. WL-10 or less. Note: BHP was 4200 psi for Morrow Formation from 10,440-800' on Belco Petroleum #1 Federal "RV-4".

7. Deviation

Obtain a Totco every 500' or on dull bit less than 500'.

8. Equipment

<u>Interval</u>	<u>Equipment</u>
2350'-TD	BOPS - Attached
7500'-TD	One man mud logging unit

Geological

1. Wireline Logging

<u>Interval</u>	<u>Description</u>
0-2350'	Compensated neutron/Gamma Ray
2350'-TD	Compensated formation density
	Compensated neutron/Gamma Ray/Caliper
	Dual Laterolog/Gamma Ray

2. Drill Samples

Every 10' from 2350' to TD.

3. Drilling Time

Every 10' from 2350' to TD.

4. Coring

None required

5. Drillstem Tests

None Required

Personnel

<u>Name & Title</u>	<u>City</u>	<u>Office Phone</u>	<u>Home Phone</u>
Steve Douglas, Drilling Engineer	Dallas	214-741-5933	214-495-7243
Mel Schroeder, Development Engineer	Midland	915-684-5584	915-684-9069
Reg Keyes, Geologist	Midland	915-684-5584	915-694-0665
Tom Waller, Regional Engineer	Midland	915-684-5584	915-682-5516

Recommended

Drilling Superintendent

Date

Chief Drilling Engineer

Date

Approved

Manager of Drilling Operations

Date

TEXAS PACIFIC OIL COMPANY
 CLASS II SYSTEM
 3000 PSI WORKING PRESSURE PREVENTER STACK
 HAZARDOUS SERVICE

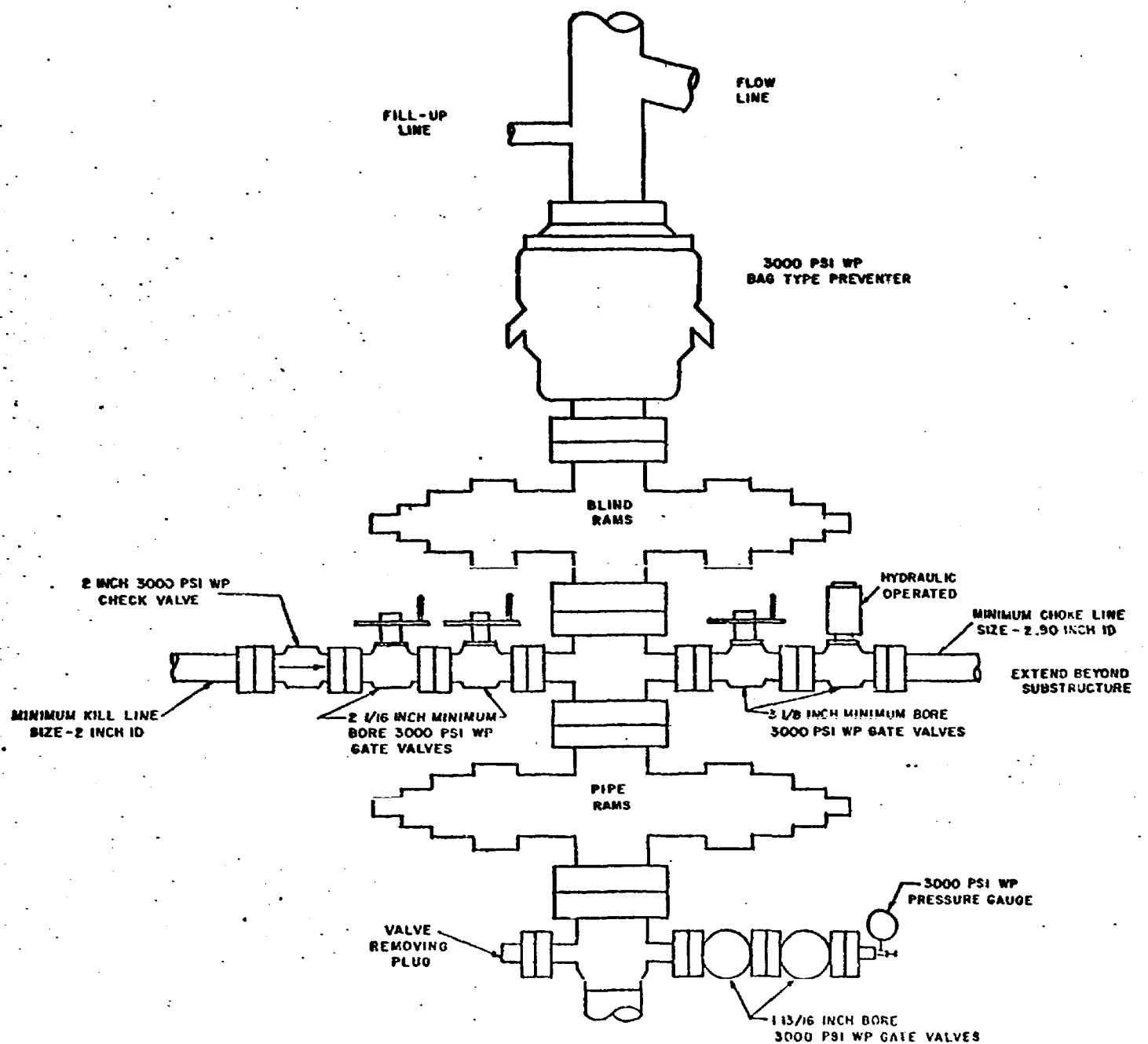
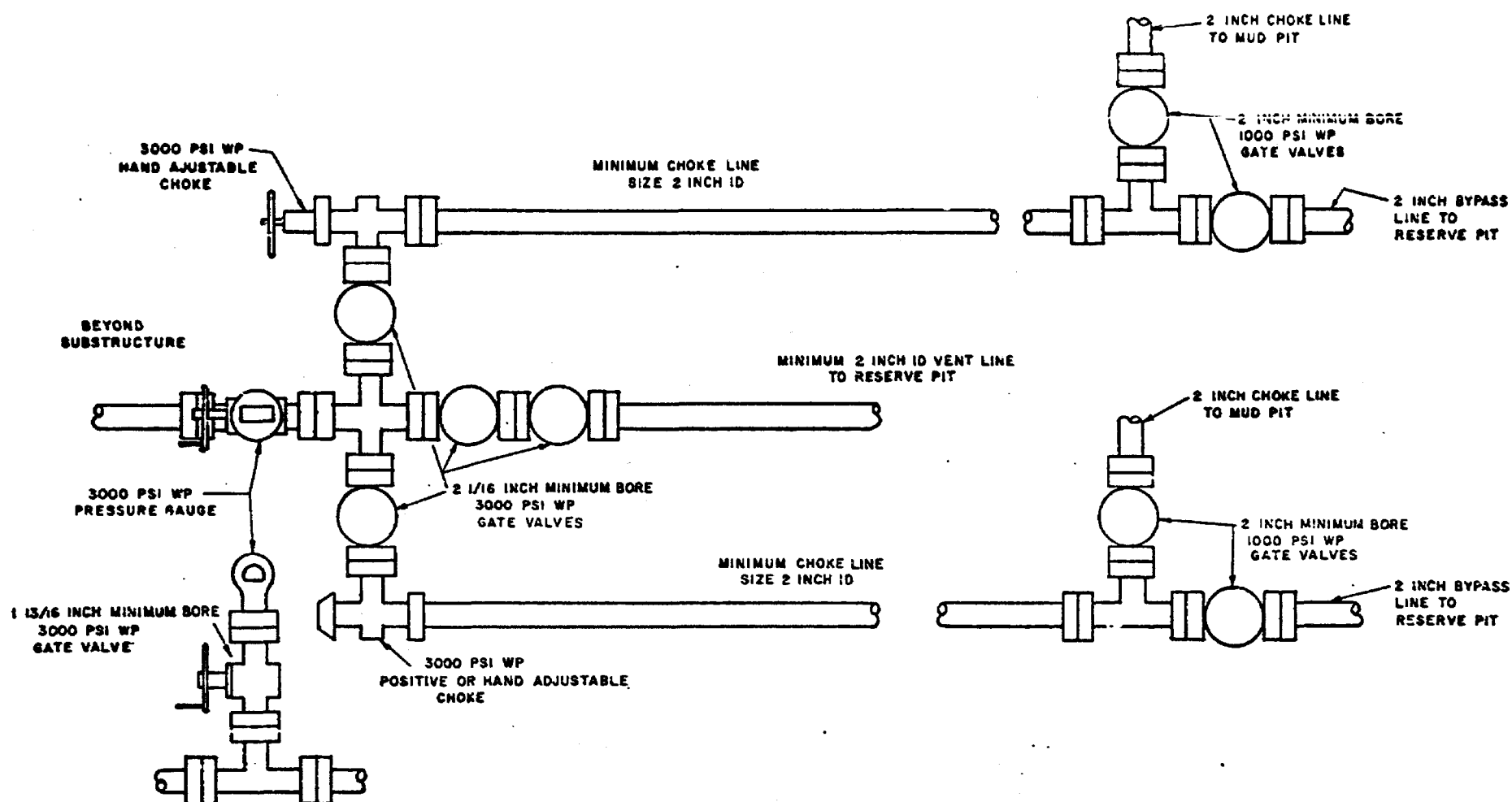


FIGURE 4.82-3



TEXAS PACIFIC OIL COMPANY
CLASS II -A SYSTEM
3000 PSI WORKING PRESSURE
CHOKE MANIFOLD
MINIMUM REQUIREMENTS

FIGURE 4.82-2

4.82 - Class IIC
3000 PSI Working Pressure
Air and Gas Drilling Service
Mandatory Minimum Requirements

This classification is for use where air or gas drilling techniques are to be used.

1. Blowout Preventer Stack

- a. The BOP stack shall consist of a rotating head, bag type preventer, two ram type preventers, and two drilling spools, as shown in Figure 4.82-5.
- b. All components of the stack (excluding the rotating head) must have a working pressure of not less than 3000 psi.
- c. All preventers must be hydraulically operated.
- d. Only preventers manufactured by Cameron Iron Works, Shaffer Tool Company or Hydril Company are acceptable.
- e. All preventers, rotating head body, drilling spools, and adapter flanges must have a bore of sufficient size to permit passage of the largest casing hanger, casing, wear bushing, bit, stabilizer, test plug or packer that may be used below the stack.
- f. The upper drilling spool shall have two side outlets, each having a minimum ID of 4 inches. The lower spool shall have at least one side outlet having a minimum ID of 4 inches.
- g. Should a fill-up line become necessary, it shall not be connected to any side outlet connection on the stack below the top preventer.

- h. All drilling spools used in this stack shall be of forged steel construction and shall have either open faced flange or bolted ring clamp side outlet, tip and bottom connections. Should dimensional limitations of the rig substructure absolutely preclude the use of these connections, studded connections would then be permitted with the approval of the District Superintendent.
 - i. Replacement parts for the BOP's must be obtained from the original manufacturer.
 - j. A spare set of pipe rams, complete with packing rubbers, for each size of pipe in use shall be kept on the rig.
 - k. A space rotating head rubber should be kept on the rig.
 - l. The stack is to be securely anchored to the rig substructure, or some other positive support, to reduce vibrations and permit some amount of alignment straightening.
 - m. Handwheels and extensions will be installed for operating the locking screws on all ram preventers. If the installation of the extensions create a safety hazard or for some unavoidable reason cannot be properly installed, a hand crank or wrench should be readily available to operate the locking screws.
2. Kill and Choke Lines, Valves, Choke Manifold and Chokes
- a. Kill and choke lines are to be completely and properly connected on all BOP installations.
 - b. The minimum acceptable arrangement of equipment is shown in Figure 4.82-6.

- c. Kill and choke lines are to be connected to the side outlets on the upper drilling spool.
- d. Although the use of drilling spools is recommended, the kill and choke line and the emergency relief line may be connected to side outlets on the preventer bodies with the approval of the District Superintendent.
- e. Neither the emergency relief line or the choke and kill lines are to be connected to the permanent wellhead outlets except in case of extreme emergency.
- f. Wing valves on the side outlets of the drilling spools, or any other side outlet on the preventer stack, must have either open faced API flanged or bolted ring clamp connections.
- g. All connections on the emergency relief line, choke line and kill line outside of the last wing valve on the preventer stack must be either open faced API flanges or studded connections.
- h. All connections on the choke manifold upstream of the chokes must be either open faced API flanges or studded connections.
- i. The minimum ID of the choke line between the preventer stack and the choke manifold, the kill line and the emergency relief line is 3.826 inches (4 inch, Schedule 80).
- j. The choke and kill lines, as well as the emergency relief line, must be of seamless steel pipe having a minimum working pressure of 3000 psi, based upon 80% of the API minimum internal yield pressure rating of the pipe.

- k. All components of the kill line, emergency relief line, choke line and choke manifold; including all elbows, tees, bull plugs, needle valves, pressure gauges, etc. must have a minimum working pressure of 3000 psi.
- l. All valves on the preventer stack, kill line, emergency relief line, choke line or choke manifold used to control the flow of fluids must be full opening gate valves having an API minimum working pressure of 3000 psi.
- m. The minimum acceptable bore sizes for all valves and lines are shown in Figures 4.82-5 and 4.82-6.
- n. Each valve must be equipped with a handwheel.
- o. The kill line shall not be used as a fill-up line.
- p. The outside wing valves on the preventer stack to the kill line, choke line and emergency relief line shall be hydraulically operated valves that can also be closed and locked manually if necessary. These valves shall be equipped with extensions for operating the valves from outside the sub-structure.
- q. The emergency relief line, the choke line between the preventers and the manifold, and the lines downstream of the manifold, must be as straight as possible with no abrupt bends. If turns are unavoidable, long radius bends (greater than 6' radius) shall be used.
- r. The emergency relief line and the choke lines both upstream and downstream of the manifold are to be firmly anchored.
- s. Steel hoses (Chicksans) may be used in the kill line, however, they are not to be used in any part of the emergency relief line, choke line or manifold.

- t. The choke manifold must be located outside the rig substructure.
- u. At least one of the chokes on the manifold must be a hand adjustable type. Although it is not a minimum requirement for this case, a hydraulic remote operated choke (Cameron or Swaco Super Choke) is recommended for the second choke.
- v. The bodies for the hand adjustable chokes (and positive choke if both are used) must be of the type where the internal parts of the two chokes may be used in either body.
- w. Replacement parts for the hand adjustable choke and a complete set of extra beans and a bean wrench for the positive choke (if used) must be kept at the rig.
- x. The horizontal distance from the downstream side of the choke to the low pressure header should be no less than five feet. However, should this spacing be impractical due to a limited area for placing the manifold outside the substructure, a shorter distance may be used with the approval of the District Superintendent.
- y. The emergency relief line, the 4 inch straight thru line, and all choke lines shall extend to a burn pit(s) located a minimum of 300 feet from the well bore.
- z. The kill line shall be extended to some remote location at least 150 feet from the well bore and in a suitable direction away from the burn pit(s) where a high pressure pump truck could be connected.

3. Blowout Preventer Control System

- a. The automatic accumulator shall be capable of delivering a volume of fluid equal to twice the amount required to operate the bag preventer and one ram preventer without depleting the accumulator pressure below a value of at least 200 psi above the precharge pressure or 1000 psi, whichever is the greatest value. (See Figure ____ in the Appendix).
- b. The accumulator unit shall be equipped with multiple pumps having sufficient capacity to completely recharge the accumulator in six minutes or less after having operated all of the hydraulic devices.
- c. The rig shall have available sufficient air capacity or electrical power to properly power the accumulator recharging pumps. Natural gas is not to be used to power the air driven pumps.
- d. Accumulator controls shall consist of one control valve for each hydraulic device. Each control shall be properly labeled with the name of the respective function and must have the open and close positions clearly marked.
- e. A pressure regulator valve for controlling the closing pressure on the bag preventer will be required.
- f. Two complete sets of controls, one on the accumulator and one remote set will be required. All controls on the remote station will be properly labeled with the name of the respective function and the open and closed positions clearly marked.
- g. A pressure regulator for control of the closing pressure on the bag preventer will also be required on the remote station.

- h. The blind ram control on both panels must be protected to avoid accidental activation. These control handles are not to be locked in position, however, as this would prevent activation from the other station.
- i. The accumulator unit shall be located at ground level not less than 100 feet from the well bore. The remote set of controls shall be on the rig floor near the driller's position.
- j. All 4-way valves that are connected to a hydraulic device must be kept in either the open or closed position. The control handle should not be in the neutral position.
- k. All hydraulic lines between the accumulator and the BOP stack or hydraulic valves must be of seamless steel pipe having an inside diameter of not less than 0.70 inch and an API minimum internal yield pressure rating of at least 5000 psi.
- l. Pressure gauges showing the accumulator pressure, the pressure on the 4-way valve manifold, the operating pressure on the bag preventer, and the air supply pressure must be installed on both the accumulator unit and the remote station and be in good working condition.
- m. All valves between the accumulator bottles and the 4-way valve manifold must be kept in the open position.
- n. Only hydraulic oil or a suitable water soluble oil may be used as the liquid phase in the accumulator.
- o. An inert gas, such as nitrogen, should be used as the gas phase in the accumulator. Do not use air or oxygen.

4. Drill String BOP Equipment

- a. Drill string blowout prevention equipment shall include one inside blowout preventer with releasing tool (Gray float valve or equivalent) and one full opening kelly valve with operating tool (Hydril or equivalent) for each size and type of drill pipe tool joint being used in the string.
- b. All cross-over subs necessary to adapt these valves to other joints in the string such as drill collars and heavy weight drill pipe must be easily identified as to thread types and be kept on the rig floor at all times.
- c. All drill string BOP equipment must be maintained in good working condition and stored (in the open position) in an orderly manner on the rig floor. Operating wrenches are to be hung in full view on or near the driller's console.
- d. All drill string BOP equipment must have a minimum working pressure of 3000 psi.
- e. The OD of all above mentioned drill string BOP equipment and necessary cross-over subs must be of such a size to permit the passage of these tools into the hole to a depth that will place the bit on bottom.
- f. The kelly shall be equipped with an upper kelly cock having a minimum working pressure of 3000 psi.
- g. The drill string shall be equipped with a drill pipe float valve located in the bottom of the lower most drill collar.

5. Other Equipment

- a. A bleed line having a minimum ID of 6 inches and a minimum wall thickness of 0.50 inches shall be installed and extended to a burn pit at least 300 feet from the well bore. This line shall be securely anchored. The use of Dresser sleeves in this line is not recommended.

- b. The blooie line should be as straight as possible with no abrupt bends or turns. If turns are unavoidable, a short dead end at each bend should be installed to reduce errosion of the line.
- c. A hydraulically operated flow line valve having a minimum bore of 6 inches shall be installed on the blooie line at the rotating head outlet.

6. General Requirements

- a. Smoking will not be permitted within 150 feet of the rig. Matches, cigarettes, lighters, etc. must be left in a designated "safe" area, a minimum of 150 feet from the rig.
- b. All auxiliary equipment, trailers, light plants, change house, etc. should be located at least 150 feet from the rig.
- c. No open fires are allowed within 150 feet of the rig. All stoves within this area must be equipped with an approved explosion proof fire box.
- d. All rig lighting will be vapor-proof. Lighting beneath the rig floor will be located as far as possible from the BOP stack, yet still provide proper illumination.
- e. All engines must have spark proof (explosion resistant) ignition system.
- f. Water lines and valves must be connected and ready for use on all engine exhausts.
- g. Engine exhausts should be welded or the flanges equipped with gaskets in good condition to insure a closed exhaust system.

- h. The rig pumps will be connected to the stand pipe at all times with the mud pits and necessary tanks filled with appropriate mud or water and ready for immediate use.
- i. Use only spark resistant tools on the rig floor or around the BOP stack and choke manifold.
- j. Welding is not permitted on the rig during air/gas drilling operations. If welding is required, circulation must be stopped, lines purged, and the area cleared of any accumulation of gas.
- k. All valves are to be lubricated periodically.
- l. All valves are to be clearly identified as being open or closed.
- m. Tighten flange bolts and turnbuckles at least once each week.
- n. Maintain proper rig alignment with the center line of the BOP stack to minimize wear.
- o. Where a dual valve arrangement is provided, the outside (downstream) valve is to be used as a working valve and the inside valve used as the master valve.
- p. A valve and pressure gauge is to be installed and in operation on all casing annuli not cemented to the surface. The pressure gauge should be positioned for easy observation.

BEFORE THE NEW MEXICO
OIL CONSERVATION COMMISSION

Rec'd
OCC
9/21
(W)

Application of Belco Petroleum
Corporation for Compulsory Pooling,
Eddy County, New Mexico.

OCC NO. 6046

MOTION TO CONSOLIDATE

Movant, TEXAS PACIFIC OIL COMPANY, INC., states as follows:

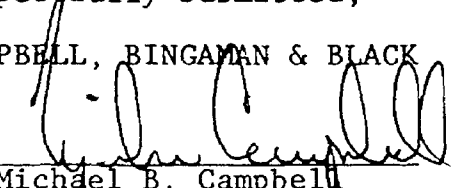
1. Movant has filed an Application for Hearing to withdraw acreage dedicated to the Catclaw Draw Morrow Pool and to extend the Revelation Morrow Pool limits to include Section 3, T22S, R25E, Eddy County, New Mexico. The Hearing is scheduled for October 12, 1977.
2. Belco Petroleum Corporation has filed a Force Pool Application for Section 3, T22S, R25E, Eddy County, New Mexico. The hearing on Belco's Application is scheduled for September 28, 1977.
3. Movant's Application, scheduled for hearing on October 12, 1977, and Belco's Application scheduled for hearing on September 28, 1977, involve common questions of law and fact and a determination on one Application will be dispositive of the other Application.
4. Belco Petroleum Corporation has refused to continue or to consolidate voluntarily its Application with Movant's Application.
5. Consolidation of a hearing on the Applications is necessary and just and in the best interests of the Commission and the Applicants.

WHEREFORE, Movant requests the Commission to consolidate the hearing on Belco's Application for Force Pooling with Movant's Application for Hearing, both Applications to be heard by the Commission on October 12, 1977.

Respectfully submitted,

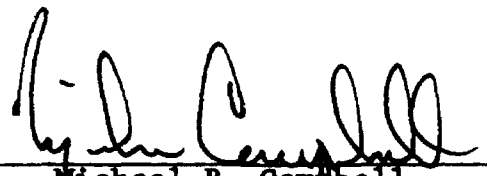
CAMPBELL, BINGAMAN & BLACK

By


Michael B. Campbell
Attorneys for Movant
Texas Pacific Oil Company, Inc.
Post Office Box 2208
Santa Fe, New Mexico 87501

CERTIFICATE OF MAILING

I hereby certify that I have mailed a true and correct copy of the foregoing Motion to Consolidate to all counsel of record in this matter this 20th day of September, 1977.



Michael B. Campbell

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN

KELLAHIN and FOX
ATTORNEYS AT LAW
800 DON GASPAR AVENUE
P. O. BOX 1769
SANTA FE, NEW MEXICO 87501



September 14, 1977

Mr. Dan Nutter
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Belco Petroleum Corporation

Dear Dan:

Please correct the application I submitted to you on September 7, 1977 for the forced pooling of Section 3 T22S, R25E, NMPM, Eddy County, New Mexico as follows:

Paragraph 2:

Name	Interest
Texas Pacific Oil Company, Inc. P. O. Box 4067 Midland, Texas 79701	W/2 of Sec. 3

Paragraph 3:

Change "Section 1" to "Section 3"

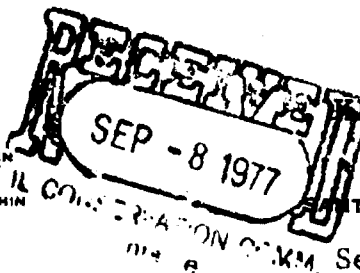
Very truly yours,


W. Thomas Kellahin

WTK:gdi

cc: Lee Nering, Belco

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN



KELLAHIN and FOX
ATTORNEYS AT LAW
800 DON GASPAR AVENUE
P. O. BOX 1769
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4318
AREA CODE 505

September 7, 1977

Mr. Dan Nutter
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Belco Petroleum Corporation

Dear Dan:

In accordance with our telephone conversation,
please find enclosed our application on behalf of Belco
for the forced pooling of Section 3, T22S, R25E, NMPM,
Eddy County, New Mexico.

Please set this matter for hearing on September 28,
1977.

Very truly yours,


W. Thomas Kellahin

CC: Mr. Lee Nering

WTK:kfm

Enclosure

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF BELCO PETROLEUM CORPORATION
FOR COMPULSORY POOLING, EDDY
COUNTY, NEW MEXICO.

A P P L I C A T I O N

COMES NOW, BELCO PETROLEUM CORPORATION, as provided by Section 65-13-4, New Mexico Statutes Annotated, 1953, as amended, and applies to the Oil Conservation Commission of New Mexico for an order pooling all the mineral interest in and under Section 3, Township 22 South, Range 25 East, N.M.P.M., Eddy County, New Mexico in formations of Pennsylvanian age or older, and in support thereof would show the Commission:

1. Applicant is the owner of the right to drill and develop the following described acreage: E/2 of Section 3, Township 22 South, Range 25 East, N.M.P.M., Eddy County, New Mexico.

2. Applicant has obtained voluntary agreement for pooling from all but the persons named below, whose addresses, and the interest owned according to applicant's information and belief are as follows:

Texas Pacific

Interest
~~E/2~~ Sec. 3
10/2

3. As required by the provision of Commission Order R-4861, applicant proposes to dedicate Section ³~~4~~, T22S, R25E, N.M.P.M., Eddy County, New Mexico to a well to be drilled at a standard location within said section to test the Morrow formation.

4. Applicant requests that it be designated operator of the pooled unit requested above.

5. Applicant has been unable to obtain voluntary agreement from the pooling of the unpooled interest indicated in paragraph 2 above, and in order to avoid the drilling of unnecessary wells, to protect correlative rights, and to prevent waste, the Commission should pool all interests in the said unit.

6. Applicant further requests for a provision for a period of 120 days from the date of the order in which to commence subject well.

WHEREFORE, applicant respectfully requests that the Commission set this matter for hearing before the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order pooling all interest underlying Section 3, T22S, R25E, N.M.P.M., Eddy County, New Mexico, and designating applicant as operator of the pooled unit, together with provisions for applicant to recover its costs of drilling and completing the well, a reasonable charge for supervision, a risk factor in the amount of 200%, all to be recovered out of production, and for such other and further provisions as may be proper in the premises.

Respectfully submitted,

BELCO PETROLEUM CORPORATION

By


KELLAHIN & FOX

P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicants

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. .6046

Order No. R- 5598

APPLICATION OF BELCO PETROLEUM
CORPORATION FOR COMPULSORY POOLING,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28,
19 77, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of December, 1977, the Commission,
a quorum being present, 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 Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Belco Petroleum Corporation, seeks
an order from the Commission pooling all mineral interests in the
Morrow formation underlying all of Section 3, Township 22 South,
Range ²⁵~~26~~ East, NMPM, Catclaw Draw-Morrow Gas Pool, Eddy County,
New Mexico.

-2-
Case No. 6046
Order No. R

(3) That by Order No. R- 5577, entered by the Commission in Case No. 6067 on this date, the Commission contracted the Catclaw-Draw Morrow Gas Pool by the deletion therefrom of all of Section 3, Township 22 South, Range ²⁵~~27~~ East, NMPM, Eddy County, New Mexico.

(4) That although the aforesaid Section 3 is within one mile of the horizontal boundaries of the Catclaw Draw-Morrow Gas Pool as contracted, the special pool rules for said pool, including the provision for 640-acre spacing and proration units, do not apply outside the boundaries of said pool.

(5) That inasmuch as the aforesaid pool rules, including the provision for 640-acre spacing and proration units, ^{no longer} ~~do not~~ apply to the aforesaid Section 3, the question of pooling all mineral interests in the Morrow formation underlying said Section 3 becomes moot, and the instant case should be dismissed.

IT IS THEREFORE ORDERED:

(1) That Case No. 6046 is hereby dismissed.

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

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