

✓
CASE 5258: Appli. of TEXAS
PACIFIC FOR 2 WATERFLOODS & DOWN-
HOLE COMMINGING AND DUALS.

CASE No.

5258

Application,

Transcripts,

Small Exhibits

ETC.

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. 5258
Order No. R-4819

APPLICATION OF TEXAS PACIFIC
OIL COMPANY FOR TWO WATERFLOOD
PROJECTS AND DOWNHOLE COMMINGLING,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 19, 1974,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of July, 1974, 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, Texas Pacific Oil Company, seeks
authority to institute two waterflood projects in its State "A"
A/C 1 Lease, Jalmat Oil and Langlie Mattix Pools, by the injec-
tion of water into the Upper Seven Rivers and Lower Seven Rivers
formations, respectively, through its State "A" A/C 1 Well No. 42
located in Unit A of Section 4, Township 23 South, Range 36 East,
NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to complete the
proposed injection well as a single completion and to determine
the volumes of injected fluid to be credited to each zone by
means of periodic spinner or other surveys.

(4) That the applicant seeks authority to complete its
State "A" A/C 1 Wells No. 44 and No. 45 located in Units B and
H, respectively, of said Section 4 in such a manner as to produce
oil from the Jalmat Oil Pool and oil from the Langlie Mattix Pool
commingled in the same wellbore.

(5) That the applicant should determine a formula for
allocation of the commingled production from said wells No. 44
and 45 in cooperation with the supervisor of the Commission's
Hobbs District Office.

CASE NO. 5258
Order No. R-4819

(6) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(7) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(8) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texas Pacific Oil Company, is hereby authorized to institute two waterflood projects in its State "A" A/C 1 lease, Jalmat Oil and Langlie Mattix Pools, by the injection of water into the Upper Seven Rivers and Lower Seven Rivers formations, respectively, in applicant's State "A" A/C 1 Well No. 42 located in Unit A of Section 4, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico;

PROVIDED HOWEVER, that injection into said well shall be through internally coated 2 3/8-inch tubing set in a packer at approximately 3600 feet; that the casing-tubing annulus shall be loaded with an inert fluid and be equipped with an approved leak detection device;

PROVIDED FURTHER, that spinner surveys shall be taken at least once each month for the first six months of active injection and at least once each four months thereafter in order to properly allocate the injected volume to the respective pools being flooded and that the results of each such survey shall be filed with the Hobbs District Office of the Commission with Commission Form C-120.

(2) That the subject waterflood projects are hereby designated the Texas Pacific Oil Company Jalmat State "A" and Texas Pacific Oil Company Langlie Mattix State A Waterflood Projects and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That the applicant is hereby authorized to complete its State "A" A/C 1 Wells No. 44 and No. 45 located in Units B and H, respectively, of said Section 4 in such a manner as to produce oil from the Jalmat Oil Pool and oil from the Langlie Mattix Pool commingled in the same wellbore.

(5) That before commencing any operations to complete, treat, or workover the Jalmat oil zone and/or the Langlie Mattix

-3-

CASE NO. 5258
Order No. R-4819

zone in either or both of said wells No. 44 and No. 45, the applicant shall contact the supervisor of the Commission's Hobbs District Office and formulate such plans and procedures as may be necessary and required to determine a formula for the allocation of the commingled production.

(6) That no injection shall be permitted in the subject projects until the formula in Order (5) above has been approved by the Santa Fe office of the Commission.

(7) 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



I. R. Trujillo
I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. Porter Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

jr/

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 19, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Texas Pacific Oil
Company for two waterflood projects
and downhole commingling or dual
completions, Lea County, New Mexico.

Case No.
5258

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

John F. Russell, Esq.
Counsel for Texas Pacific
Oil Company
Roswell, New Mexico

CASE 5258

Page.....2.....

I N D E X

PAGE

ALLEN A. WICKE

Direct Examination by Mr. Russell

3

Cross Examination by Mr. Stamets

18

E X H I B I T S

Marked

Admitted

Applicant's Exhibits Nos. 1
through 9

--

18

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

WICKE-DIRECT

CASE 5258

Page.....3.....

MR. STAMETS: Call the next case, Case 5258.

MR. DERRYBERRY: Application of Texas Pacific Oil Company for two waterflood projects and downhole commingling or dual completions, Lea County, New Mexico.

MR. RUSSELL: John F. Russell, Roswell, New Mexico, appearing on behalf of the Applicant and I have one witness.

MR. STAMETS: Are there any other appearances in this Case? The Witness will stand and be sworn, please.

(Witness sworn.)

ALLEN A. WICKE

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. RUSSELL:

Q Will you please state your name, address, the name of your employer, and the capacity in which you are employed?

A My name is Allen Wicke, I live at 3318 Windsor Drive in Midland, Texas, I'm employed by Texas Pacific Oil Company as Senior Engineer.

Q And have you previously qualified to testify before this Commission?

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

WICKE-DIRECT

CASE 5258

Page.....4

A I have.

Q Are you familiar with the Application of Texas Pacific Oil Company in Case No. 5258?

A I am.

Q And what were you seeking by this Application?

A Texas Pacific was seeking authority to institute two waterflood projects, one in the Jalmat Oil Pool and one in the Langlie-Mattix Pool on the State "A" Account 1 Lease insofar as this Lease covers the Northeast quarter of Section 4, Township 23 South, Range 36 East, Lea County, New Mexico. Authority was requested to commingle water downhole for injection into these two zones and State "A" Account 1 Well No. 42, and to commingle production from these zones and the wellbore of State "A" Account 1 Wells No. 44, 45, and 87, or in the alternative, to dual and complete the injection of producing wells through parallel strings of tubing.

Q Now, since the filing of this Application, have you given this matter further study and wish to modify your Application?

A Yes.

Q In what respect?

A In the event that downhole commingling was not

approved, TP would abandon the Jalmat waterflood and inject only into the Langlie-Mattix.

Q That would be the downhole commingling of both the injection water and the production, is that correct?

A We would inject only into the Langlie Mattix.

Q Yes, unless you got the commingling in both production and injection wells?

A Right.

Q All right. In connection with this Case, have you prepared some Exhibits?

A Yes, I have.

Q I will refer you to what has been marked as TP Exhibit No. 1 and ask you what that is and what it reflects?

A Exhibit 1 is a map of the proposed project area showing the location of the proposed injection well indicated by the red arrow and also showing all wells and operators within a radius of two miles of this area.

Q Now, the proposed injection well is the one where the red arrow is pointing, is that correct?

A Correct.

Q Will you give the location of that well?

A This well, Well No. 42 on the State "A" Account 1

WICKE-DIRECT

CASE 5258

Page.....6.....

Lease is located in Unit A, Section 4, Township 23 South, Range 36 East.

Q And it also shows your production Wells 44, 45 and 87. Will you give those locations?

A Well No. 44 is located in Unit B, Section 4; Well No. 87 is in Unit G and Well No. 45 in Unit H of this Section.

Q Now, on this Exhibit, the yellow is your State "A" Account No. 1 Well?

A The yellow represents State "A" Account 1 Lease, correct.

Q Now, the black dots represent producing oil wells, is that correct?

A Correct.

Q What does that "jo" under your Well 87 mean?

A The "jo" means that these oil wells are producing or have produced from the Jalmat Oil Pool.

Q All right, and directly to the North of your proposed location is the Continental South Eunice Unit, is it not?

A Correct.

Q What are the black dots with triangles around them, what do they mean?

WICKE-DIRECT

CASE 5258

Page.....7

A The dots with triangles represent locations of injection wells, either proposed or currently injecting.

Q And to the right of the South Eunice Unit is the Atlantic Seven-Rivers Queen Unit, is that correct?

A Correct.

Q And the same designations apply to that Unit as to South Eunice and yours?

A Correct.

Q All right. I'll refer you to what has been marked as TP's Exhibit No. 2 and ask you what that Exhibit is.

A Exhibit No. 2 is a log of Well No. 42, the proposed injection well.

Q What does it reflect?

A At the bottom of the log, indicated on the log, is the estimated gas-oil contact at 150 feet below sea level, indicated by the dashed line, and also indicated is the estimated water-oil contact at 170 feet below sea level, indicated by the lower dashed line, and also indicated is the statutory limits of Jalmat and Langlie-Mattix falling at 3700 feet here, the Jalmat Pool being above this point and Langlie-Mattix below. The present perforations are also indicated on the log from 3718 feet to

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

3738 feet. Also the proposed additional perforations in two zones of the Jalmat interval are indicated from 3650 feet to 3684 feet.

Q All right. Now I refer you to TP Exhibit No. 3 and ask you what that is.

A Exhibit No. 3 is the wellbore sketch of the proposed injection well No. 42. This sketch indicates that in this well 9-5/8th inch surface casing set at 3160 feet with 300 sacks of cement which was circulated to the surface; it indicates the 7 inch production casing set at 3794 feet with 200 sacks of cement and the cement top at 2850 feet. Shown on the sketch are present perforations at 3718 to 3738 feet, and the locations of our proposed Jalmat perforations, two intervals from 3650 feet to 3684 feet.

Q Now, in the event your Application is approved, how do you intend to complete this injection well and how do you intend to inject the water?

A We would inject through 2-3/8th inch plastic coated tubing set on a tension factor of approximately 3600 feet.

Q And would the space between the casing and the plastic coated tubing be filled with an inert fluid?

A Yes, it would.

Q And would you maintain at the surface such monitoring type system as the Commission might require to determine leakage?

A Yes.

Q Now, where will the water for this flood come from?

A The water source is Capitan Reef and it's supplied by Continental as operator of the South Eunice Unit.

Q At what rate do you initially intend or anticipate injecting this water?

A We anticipate an injection rate of from 200 to 400 barrels a day.

Q Will it be injected under pressure or gravity?

A Yes, we expect that eventually it will require pressure to inject.

Q All right. I refer you to what has been marked as TP Exhibit No. 4 and ask you to say what it is and show the information set out there?

A Exhibit No. 4 is the wellbore sketch of producing Well No. 44. It indicates that this well has 8-5/8th inch surface casing at 328 feet cemented with 300 sacks of

cement which was circulated to the surface and it indicates 5-1/2 inch production casing at 3800 feet cemented with 250 sacks of cement with top of the cement at 2785 feet. It indicates our present perforations in two zones from 3700 feet to 3750 feet and the locations of our proposed Jalmat perforations, two zones from 3628 feet to 3658 feet.

Q And through what type of tubing is this well producing at this time?

A It's producing through 2-3/8th inch tubing with seating nipple at 3700 feet.

Q All right. Turn to TP Exhibit No. 5 and give the same type of information for this Exhibit as the prior one.

A Exhibit No. 5 is a wellbore sketch of producing Well No. 45. It indicates that this well has 9-5/8th inch surface casing set at 315 feet cemented with 300 sacks. The cement was circulated to the surface. It indicates 7 inch production casing at 3799 feet cemented with 250 sacks of cement. The top of the cement is at 2315 feet. This sketch indicates our present perforations in two zones of the Langlie-Mattix from 3706 to 3750 feet; it indicates the locations of our proposed Jalmat perforations

WIGKE-DIRECT

CASE 5258

11

Page.....

in two zones from 3636 to 3668 feet; it indicates we're presently producing through 2-3/8th inch tubing at 3710 feet.

Q All right. Now I refer you to TP Exhibit No. 6 and give the same information on it.

A Exhibit No. 6 is a wellbore sketch of Well No. 87. This sketch indicates that the well has 9-5/8th inch surface casing at 316 feet cemented with 300 sacks. The cement was circulated to the surface. It indicates 7 inch casing set at 3777 feet with 250 sacks of cement. The top of the cement is 2360 feet. It is indicated that originally this well was perforated at 3763 feet to 3768 feet but these perforations were squeezed off with 250 sacks of cement and the well is presently perforated at two intervals from 3646 feet to 3675 feet. This sketch also indicates that the well is producing through 2-7/8 inch tubing on a tension anchor with the seating nipple at 2300 feet.

Q Now, this well is producing from the Jalmat Pool, is it not?

A Correct.

Q And Wells 44 and 45 are producing from the Langlie-Mattix?

A Correct.

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

WICKE-DIRECT

CASE 5258
Page.....12.....

Q And unless the downhole commingling of the injection water in Well 42 and the commingling of production down in the wellbore in Wells 44, 45 and 87 are authorized, you are abandoning your plans to, at this time, open and flood the Jalmat Pool, is that correct?

A Correct.

Q Therefore, unless it were approved, this Well would not be affected by your present amended request which would only include the Langlie-Mattix?

A Correct.

Q All right. Now I refer you to what has been marked as TP Exhibit No. 7 and ask you what that is?

A Exhibit No. 7 is a copy of the well log of producing Well No. 44. Indicated on this log again is the location of the estimated oil-water contact at 150 feet below sea level, indicated by the dashed line. Also indicated is the top of the Queen formation at the bottom of the log at 3780 feet, and 100 feet above this is indicated the statutory limits of the Jalmat and Langlie-Mattix Pool at 3680 feet. Also indicated on this log is the present perforations in the Langlie-Mattix interval from 3700 to 3750 feet and also the location of the proposed Jalmat perforations two zones from 3628 to 3658 feet.

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

Q All right. Now refer to what has been identified as TP Exhibit No. 8 and explain that Exhibit?

A Exhibit 8 is a copy of the well log of producing Well No. 45. Again, indicated on this log is the location of the estimated gas-oil contact at 150 feet below sea level; the top of the Queen is indicated at 3782 feet and 100 feet above this point is indicated the statutory limit of the Jalmat and Langlie-Mattix intervals at 3682 feet. Also indicated are locations of the present Langlie-Mattix perforations from 3706 to 3750 feet, and the proposed Jalmat perforations are also indicated from 3636 feet to 3668 feet, two intervals.

Q Now go to TP Exhibit No. 9 and explain it?

A Exhibit No. 9 is a copy of the log of producing Well No. 87. Indicated on this log is again the estimated gas-oil contact at 150 feet below sea level, the estimated statutory limits of the Jalmat and Langlie-Mattix Pool is indicated at 3698 feet. Indicated on this log is original perforations from 3763 to 3768 feet, which were squeezed off. These perforations have produced water and the well was subsequently completed in the present perforations indicated that 3646 to 3675 feet.

Q At the present time, if the Commission approves

your amended request, you do not have plans for additional perforations in the Langlie-Mattix Pool, is that correct?

A Not at this time, no. It was indicated to be water production.

Q Now, do you have the figures on the cumulative production from these wells and present production?

A Yes. Cumulative production up to April 1st, '74, has been: Well No. 42, 98,268 barrels, Well No. 44, 98,241 barrels, Well No. 45, 85,458 barrels, and all three of these Wells have produced only from the Langlie-Mattix Pool. Well No. 87, however, has produced 59,463 barrels from the Jalmat Oil Pool. The latest well tests indicate Well No. 42 to have a capacity of 3 barrels of oil, 8 barrels of water and 31 mcf gas per day. Well No. 44 produces 8 barrels of oil, 40 barrels of water, 88 mcf gas per day. Well No. 45 produces 5 barrels of oil, 8 barrels of water 56 mcf gas per day. Well No. 87, from the Jalmat interval, produces 12 barrels of oil, 410 barrels of water and 46 mcf gas per day.

Q These wells are now approaching their economic limitations of continuation and are getting into stripper stage, are they not?

A That is correct.

Q All right. Now I want to refer you back to TP's Exhibit No. 1. Now your Lease which is State "A" Account 1 is all a State lease and there is no variation in ownership between the two zones or pools, the Jalmat and the Langlie-Mattix, is that correct?

A That's correct.

Q Now, this South Eunice Unit which you referred to previously, that is the Unit which has been approved by this Commission, has it not?

A That is correct.

Q Do you know the intervals covered by that Unit Agreement?

A Yes. The unitized interval for the South Eunice Unit is all the formation from the base of the Queen to a point 232 feet above the top of the Queen formation.

Q And is that interval, does that cover the proposed and present perforations in the Jalmat and Langlie-Mattix Pools in your Application?

A Yes. This unitized interval covers the interval we propose to flood.

Q Do you know whether the production from the Jalmat and the Langlie-Mattix in the South Eunice Unit

are commingled in the wellbore?

A Yes, I understand that production from the majority of the wells is commingled downhole.

Q And where did you get your information?

A Through conversations with Continental Engineers.

Q And where else? Have you checked any statistical reports on production?

A Okay. Well, as we have covered before, the unitized interval overlaps, covers, the Langlie-Mattix interval and overlaps into the Jalmat, and all proration and production reports are carried in the South Eunice field which is correlative to the Langlie-Mattix interval.

Q Now--

A (Interrupting) With no production carried as to the Jalmat production.

Q (Continuing) From your three wells being 44, well actually at this point, 42, 44, 45, and 87, is production from those four wells being commingled at the surface at this time?

A Yes, production is commingled at the surface and TP has authorization to do so.

Q Have you entered into or in the process of negotiating lease-line agreements with Continental and

WICKE-DIRECT

CASE 5258

Page.....17.....

Atlantic?

A Yes. Texas Pacific has entered into a three-party-cooperative lease-line agreement with the South Eunice Unit and with the Seven-Rivers Queen Unit. This Agreement states in essence that, in order to balance the flood across the lease line, Continental, as operator of the South Eunice Unit, will convert Well 62 for injection; Atlantic Richfield, as operator of the Seven-Rivers Queen Unit, will convert Well No. 49, and Texas Pacific will convert Well No. 42 on our State "A" Account 1 Lease.

Q Let me recap your position once more. It's your present position, is it not, that unless you are authorized to commingle the water for injection into the Jalmat and Langlie-Mattix Pools and are authorized to commingle in the wellbore production from the Langlie-Mattix and Jalmat Pools, that you will abandon your request for flooding of the Jalmat Pool and restrict it to the Langlie-Mattix?

A That is correct.

Q Now, in your opinion, will the approval of your Application prevent waste from premature abandonment of wells and also protect the correlative rights and let you acquire your fair share of the oil from these two pools?

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

WICKE-DIRECT
CROSS

CASE 5258

Page.....18

A Yes, it will.

Q Were Exhibits 1 through 9 prepared by you or
under your supervision and direction?

A Yes.

MR. RUSSELL: Mr. Examiner, I offer Exhibits
1 through 9 into evidence at this time.

MR. STAMETS: These Exhibits will be admitted
into the record.

(Whereupon, Applicant's Exhibits Nos.
1 through 9 were admitted into evidence.)

MR. RUSSELL: I have nothing further of this
Witness.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Wicke, do you have any casings at the
Jalmat zone in the 44 and 45 Wells that are productive?

A I certainly anticipate that they would be pro-
ductive. First of all they produced in Well No. 87 and they
look comparative on the logs of the other wells and they fall
below what is recognized as gas-oil contact for this field.

Q Mr. Wicke, most times when downhole commingling
is authorized there is some formula set out for accounting
for the production so that a portion of the production, in

this case, would be assigned to the Jalmat Oil Pool and another portion of it would be assigned to the Langlie-Mattix Oil Pool. You have not proposed that here. Is there any reasonable way that that could be done?

A The best way would be to base it on a net-pay relationship for the two zones.

Q The Langlie-Mattix zone has been subject to drainage for some time; the Jalmat zone and these two Wells, 44 and 45, has not been drained, at least as much; do you think that that would be a fair way to work that out at this time, with one zone being drained and the other zone not being drained?

A I think it is the best way we have to go by at this point.

Q Would say a 30 day or 60 day production test after perforation of the Jalmat zone would maybe give you a little bit better information?

A Possibly, yes.

Q If an accounting of production from the two separate zones would be required, would Texas Pacific be willing to go along with that and flood both zones?

A By downhole commingling?

Q Yes?

A Yes.

Q Now, you show injection wells in the Continental South Eunice Unit and Arco Seven-Rivers Queen Unit. To your knowledge, are any of these injection wells off-setting your property, one at two locations injecting into the Jalmat oil zone as well as the Langlie-Mattix oil zone?

A I know specifically Well No. 62, which is the direct off-set of Well No. 44, is, and I understand, although I don't have any direct knowledge, the majority of the wells, both producing and injection wells in this Unit, are open to both zones, and they had been throughout the primary production.

Q Is this possibly in an old area where the zones had been commingled before the pools were established as they are today?

A It is possible but I really don't know when most of these wells were completed, myself.

Q Our records would reflect that.

A Yes.

Q Do you plan to conduct any injectivity tests to see what the Jalmat zone and the Langlie-Mattix zone might be taking in there?

A We would run periodic tracer surveys.

Q And that would give you a rough idea?

A Correct.

Q You discussed things that you would do to try and insure that there was no leak in the tubing or the packer or the casing on the injection well. Will you have people in the field who will be inspecting these injection wells on a regular basis?

A Yes, sir.

Q And would they report any leakage from the well or around the well to the appropriate District Office?

A Yes, they would.

Q I would like to refer to your Exhibit No. 6, Well No. 87? I note that the tubing is set at 2300 feet; the uppermost perforation is 3646 feet; that's about 1300 feet from the base of the tubing to the perforations which is considerably more than the minimum set out in the Commission Rules and Regulations. Has a tubing exception been applied for on that well and granted?

A I don't know.

Q Do you know why the tubing is that far above perforations?

A Well, as the well test indicates, this well is producing 410 barrels of water a day, and I would guess

WICKE - CROSS

CASE 5258

Page.....22

that this area we're close to the reef where some of the Jalmat wells have experienced or have produced under water drive mechanism. This well has a high water level and lowering the tubing would possibly only increase water production, although I have no direct knowledge of what the situation is.

Q Can you efficiently produce this well under waterflood conditions with the tubing that high?

A I don't know, it would have to be looked into. We generally like to set the tubing below the perforations where possible.

Q I would point out at this time then that if this is where you intend to leave the tubing upon completion you should request an exception to the tubing requirements of the Rules and Regulations.

MR. STAMETS: Are there any other questions of the Witness?

MR. RUSSELL: I have nothing further, Mr. Examiner.

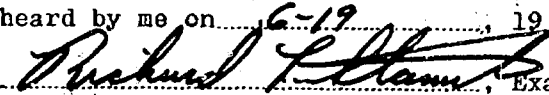
MR. STAMETS: He may be excused. Is there anything further in this Case? We will take the Case under advisement.

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

STATE OF NEW MEXICO)
COUNTY OF SANTA FE) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.


RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5258, heard by me on 6-19, 1974.

Richard L. Nye, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE NEW MEXICO 87501

March 10, 1975

Mr. T. J. Waller,
District Engineer
Texas Pacific Oil Company
P. O. Box 4067
Midland, Texas 79701

Re: State "A" A/C-1 Waterflood
Project, Jalmat and Langlie
Mattix Pools, Lea County,
New Mexico

Dear Mr. Waller:

Referring to your letter of March 3, 1975,
in view of the results of production tests on wells
44 and 45 in the subject waterflood, all production
from said wells should continue to be credited to
the Langlie Mattix interval only.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/RLS/dr

cc: Mr. Joe Ramey
Case 5258

C
O
P
Y

TEXAS PACIFIC OIL COMPANY, INC.

P. O. Box 4067
Midland, Texas 79701

March 3, 1975

Secretary-Director
New Mexico Oil Conservation Commission
State Land Office Building
College Avenue
Santa Fe, New Mexico 87501

Can 5258

Re: TEXAS PACIFIC OIL COMPANY, INC.
STATE "A" A/c-1 WATERFLOOD
DOWNHOLE COMMINGLING
ORDER NO. R-4819

Gentlemen:

In the above referenced Order, approval was granted to conduct waterfloods of the Jalmat and Langlie Mattix Pools and to commingle injection and production downhole. This approval was subject to the provision (among other provisions) that a formula to allocate production to the two zones from producing wells No. 44 and 45 be approved by the Santa Fe office of the Commission. The Jalmat interval in these two wells was perforated, selectively treated and placed on production with the Langlie Mattix interval, commingling downhole, in January, 1975. Listed below are the before workover and after workover tests of these two wells. The "after" tests were taken approximately one month following the workovers and should represent stabilized conditions.

		BEFORE (LANGLIE MATTIX ONLY)
Well No. 44	1/6/75	8 BO + 42 BW + 33 MCF
Well No. 45	1/7/75	6 BO + 8 BW + 68 MCF
		AFTER (LANGLIE MATTIX PLUS JALMAT)
Well No. 44	2/25/75	8 BO + 58 BW + 37 MCF
Well No. 45	2/25/75	6 BO + 30 BW + 46 MCF

In view of the fact that adding the Jalmat interval did not change production rates appreciably, we request your approval to continue to allocate all production from the two wells to the Langlie Mattix interval only. Mr. Joe Ramey of the Commission's Hobbs District Office has verbally agreed to this request, subject to your approval. If you cannot allow us to continue to allocate all production to the Langlie Mattix indefinitely, please grant the approval at least until you hear our case for revising the pool limits in this area in such manner that would place all of the oil sands in the Langlie Mattix Pool. We plan to schedule a hearing date within two months to request

Page Two

an expansion of the waterflood area and the revision of the vertical limits of the pools.

Very truly yours,

TEXAS PACIFIC OIL COMPANY, INC.



T. J. Waller
District Engineer

AAW:cs

cc: Mr. Joe Ramey, Supervisor
District I, NMOCC
P. O. Box 1980
Hobbs, New Mexico 88240

Mr. Lloyd Wright
Area Superintendent



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

July 9, 1974

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Re: CASE NO. 5258
ORDER NO. R-4819

Mr. John Russell
Attorney at Law
Post Office Drawer 640
Roswell, New Mexico 88201

Applicant:
Texas Pacific Oil Company

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC

Other State Engineer Office

Docket No. 17-74

Dockets Nos. 19-74 and 20-74 are tentatively set for hearing on July 16 and July 24. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 19, 1974

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

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

CASE 5256: Application of Monsanto Company for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to plug back its Arco Federal Well No. 2 located 990 feet from the North line and 2310 feet from the East line of Section 13, Township 21 South, Range 26 East, Burton Flats Field, Eddy County, New Mexico, to a depth of 9314 feet and to set a whipstock and directionally drill said well in such a manner as to bottom it in the Morrow formation within a 50-foot radius of a point 660 feet from the North line and 1980 feet from the East line of said Section 13.

CASE 5257: Application of Mobil Oil Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 12 Com Well No. 1 to be drilled to the Morrow formation at a point 1300 feet from the South line and 660 feet from the East line of Section 12, Township 21 South, Range 26 East, Eddy County, New Mexico, the E/2 of said Section 12 to be dedicated to the well.

CASE 5258: Application of Texas Pacific Oil Company for two waterflood projects and downhole commingling or dual completions, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State "A" Act. 1 Well No. 42 located in Unit A of Section 4, Township 23 South, Range 36 East, Lea County, New Mexico, for the purpose of injecting water into the Upper Seven-Rivers formation of the Jalmat Pool and the Lower Seven-Rivers formation of the Langlie-Mattix Pool for the purpose of secondary recovery. Applicant further seeks approval for the downhole commingling in the wellbore of Jalmat and Langlie-Mattix production in the off-setting wells Nos. 44, 45, and 87, located in Units B, H, and G, respectively, of said Section 4; in the alternative applicant seeks approval for the dual completion of the aforesaid three wells to produce oil from said pools through parallel strings of tubing.

CASE 3608: (Reopened)

In the matter of Case No. 3608 being reopened pursuant to the provisions of Order No. R-3282, which order established temporary rules for the Carlsbad Permo-Penn Gas Pool, Eddy County, New Mexico, including a provision for 640-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

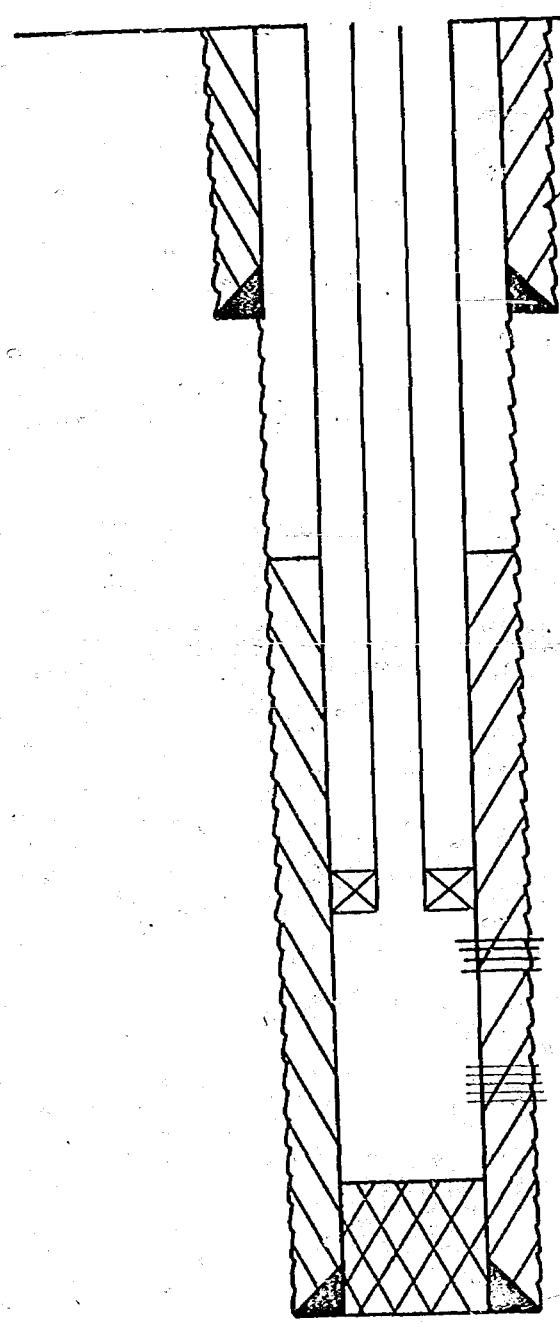
- CASE 5259: Application of Read & Stevens, Inc. for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for a well proposed to be drilled 660 feet from the South line and 990 feet from the East line of Section 30, Township 20 South, Range 25 East, Eddy County, New Mexico, in exception to the pool rules for the Indian Basin-Morrow Gas Pool or the Cemetary-Morrow Gas Pool, whichever is applicable.
- CASE 5260: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit R & G Drilling Company and all other interested parties to appear and show cause why Order No. DC-1026, which authorized dual completion in the Blanco-Mesaverde and Basin-Dakota Pools, should not be rescinded and the Hammond Well No. 47 located in Unit K, Section 35, Township 27 North, Range 8 West, San Juan County, New Mexico, be recompleted as a single zone well.
- CASE 5261: Application of Amerada Hess Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation through the openhole interval from 11,160 feet to 11,230 feet of its H. C. Posey "A" Well No. 1 located in Unit O of Section 11, Township 12 South, Range 32 East, East Caprock-Devonian Pool, Lea County, New Mexico.
- CASE 5262: Application of Petro-Lewis Corporation for pool contraction, creation, and special pool rules, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the Media-Entrada Oil Pool by the deletion of the NW/4 of Section 22, Township 19 North, Range 3 West, Sandoval County, New Mexico, and the creation of a new pool for Entrada production comprising said lands. Applicant further seeks the promulgation of special rules for said pool, including a provision for 160-acre proration units and the establishment of a special depth bracket allowable for said pool of up to 750 barrels per day.
- CASE 5263: Application of Reading & Bates Oil and Gas Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox gas well location for a well proposed to be drilled at a point 660 feet from the South and West lines of Section 8, Township 18 South, Range 26 East, Eddy County, New Mexico, the S/2 of said Section 8 to be dedicated to the well.
- CASE 5251: (Continued from the June 5, 1974, Examiner Hearing)
- Application of Pierce & Dehlinger for the Amendment of Order No. R-4560, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4560 to provide for an extension of time in which to comply with the schedule set forth in said order for the drilling and completion of the third well covered by said order, to be located in the NE/4 of Section 24, Township 9 South, Range 33 East, Vada-Pennsylvanian Pool, Lea County, New Mexico.

200
400
Burd

TEXAS PACIFIC OIL CO., INC.
STATE A ACCT. 1 WELL NO. 42
SEC. 4, T-23-S, R-36-E
660' FNL AND 660' FEL
LANGI.E MATTIX POOL
LEA COUNTY, NEW MEXICO
COMPLETION DATE 12/14/57

Elevation 3480' GL

Load gauge
mon. for



9 5/8" casing set @ 316' w/300 sx cement.
Cement circulated.

Top of cement @ 2850'

2 3/8" plastic-coated tubing on tension packer
@ approximately 3600'

Additional perforations (proposed): 3650'-3665'
3670'-3684'

Perforations: 3718'-3738'

7" casing set @ 3794' w/200 sx cement

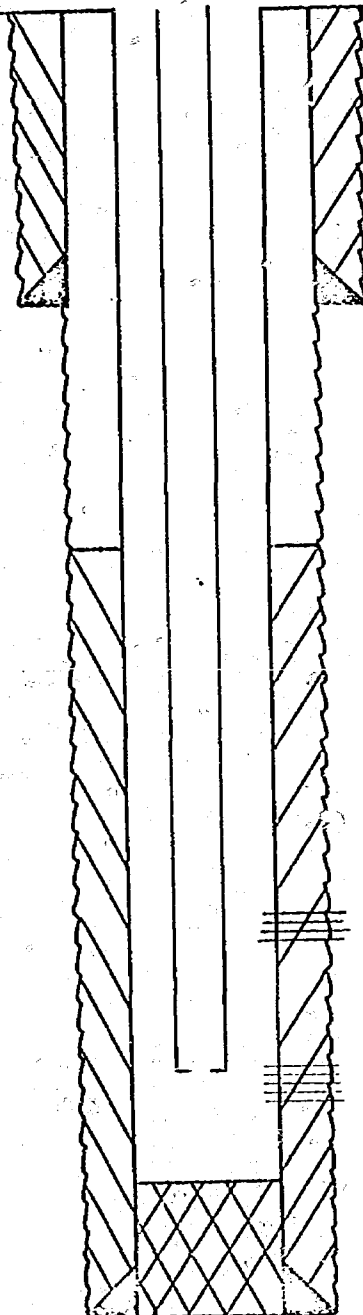
PBTD: 3772'

TD: 3795'

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
APPN	EXHIBIT NO. 3
CASE NO.	5258
Submitted by	TP
Hearing Date	6/19/74

TEXAS PACIFIC OIL CO., INC.
STATE A ACCT. 1 WELL NO. 44
SEC. 4, T-23-S, R-36-E
660' FNL AND 1980' FEL
LANGLIE MATTIX POOL
LEA COUNTY, NEW MEXICO
COMPLETION DATE: 1/27/59

Elevation 3462' GL.



8 5/8" casing set @ 328' w/300 sx cement.
Cement circulated.

Top of cement @ 2785'

2 3/8" tubing w/SN @ 3700'

Additional perforations (proposed): 3628'-3634'
3646'-3658'

Perforations 3700'-3712'
3740'-3750'

5 1/2" casing set @ 3800' w/250 sx cement

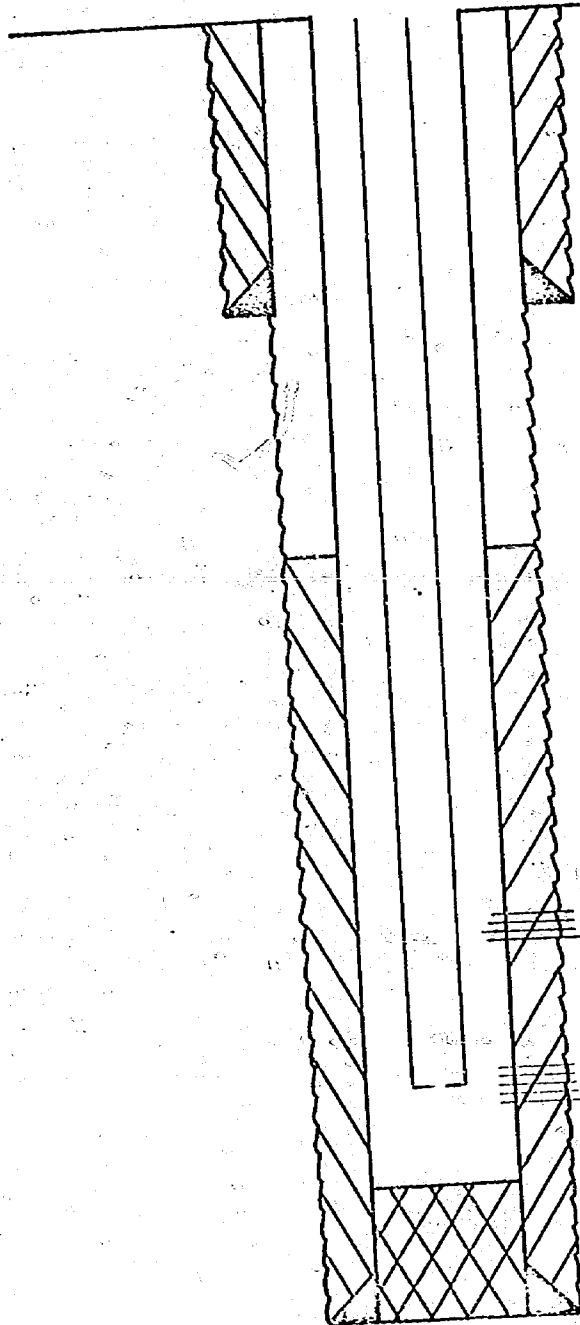
PBTD: 3790'

TD: 3800'

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
APPN EXHIBIT NO. 4
CASE NO. 5258
Submitted by TP
Hearing Date 6/19/74

TEXAS PACIFIC OIL CO., INC.
STATE A ACCT. 1 WELL NO. 45
SEC. 4, T-23-S, R-36-E
1980' FNL AND 660' FEL
LANGLIE MATTIX POOL
LEA COUNTY, NEW MEXICO
COMPLETION DATE: 2/21/59

Elevation 3467' GL



9 5/8" casing set @ 315' w/300 sx cement
Cement circulated

Top of cement @ 2315'

2 3/8" tubing w/SN @ 3710'

Additional perforations (proposed): 3636'-3644'
3654'-3668'

Perforations 3706'-3722'
3740'-3750'

7" casing set @ 3799' w/250 sx cement

PBTD: 3786'

TD: 3800'

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
APPN EXHIBIT NO. 5
CASE NO. 5258
Submitted by TP
Hearing Date 6/19/74

TEXAS PACIFIC OIL CO., INC.
STATE A ACCT. 1 WELL NO. 87
SEC. 4, T-23-S, R-36-E
1980' FNL AND 1980' FEL
JALMAT OIL POOL
LEA COUNTY, NEW MEXICO
COMPLETION DATE: 7/4/60

Elevation 3476' GL

9 5/8" casing @ 316' w/300 sx cement
Cement circulated

Top of cement @ 2360'

2 7/8" tubing on tension anchor w/SN @ 2300'

Perforations 3646'-3655'
3666'-3675'

Perforations @ 3763'-3768' were squeezed off
w/250 sx cement.

7" casing set @ 3777' w/250 sx cement

PBTD: 3754'

TD: 3777'

Jalmat only

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
APPN EXHIBIT NO.	6
CASE NO.	5258
Submitted by	JP
Hearing Date	6/19/74

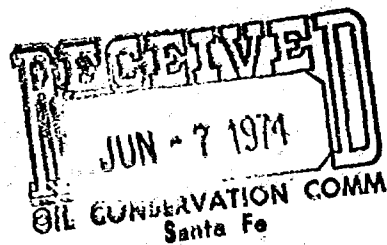
LAW OFFICES OF
JOHN F. RUSSELL
412 HINKLE BUILDING
P. O. DRAWER 640
ROSWELL, NEW MEXICO 88201

TELEPHONE 622-4641
AREA CODE 505

June 6, 1974

Case 5258

Mr. A. L. Porter, Jr.
Secretary - Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501



Dear Mr. Porter:

I transmit herewith in triplicate an application of Texas Pacific Oil Company, Inc. for two pilot waterflood projects together with various exhibits in connection with the application.

Very truly yours,

John F. Russell
John F. Russell

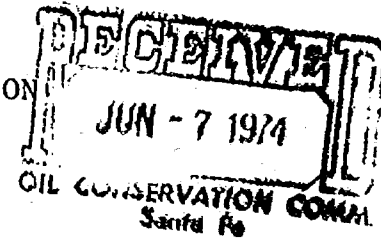
JFR:jb
Enclosures

DOCKET MAILED

Date

6-7-74

BEFORE THE OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO



IN THE MATTER OF THE APPLICATION OF
TEXAS PACIFIC OIL COMPANY, INC., FOR
THE ESTABLISHMENT OF TWO PILOT WATER-
FLOOD PROJECTS ON ITS STATE "A" ACCT.
NO. 1 LEASE INSOFAR AS THEY COVER THE
NE $\frac{1}{4}$ OF SECTION 4, TOWNSHIP 23 SOUTH,
RANGE 36 EAST, LEA COUNTY, NEW MEXICO.
APPLICANT PROPOSES TO CO-MINGLE THE
WATER IN THE INJECTION WELL FOR THE
FLOODING OF THE UPPER AND LOWER SEVEN
RIVERS FORMATIONS AND FOR THE CO-MINGLING
IN THE WELL BORE OF PRODUCTION FROM
SAID FORMATIONS OR IN THE ALTERNATIVE
TO DULY COMPLETE THE INJECTION WELL
AND THE PRODUCING WELLS FOR THE
INJECTION OF WATER INTO AND THE
PRODUCTION FROM THE UPPER SEVEN RIVERS
FORMATIONS AND THE LOWER SEVEN RIVERS
FORMATIONS IN THE JALMAT AND LANGLEIE
MATTIX POOLS, ALL LOCATED IN THE NE $\frac{1}{4}$
OF SECTION 4, TOWNSHIP 23 SOUTH,
RANGE 36 EAST, LEA COUNTY, NEW MEXICO.

Case 5-258

APPLICATION

COMES NOW Texas Pacific Oil Company, Inc., through its attorney, John F. Russell, and requests that the Commission enter an Order authorizing the institution of two pilot waterflood projects on its State "A" Account No. 1 Lease insofar as they cover the NE $\frac{1}{4}$ of Section 4, Township 23 South, Range 36 East, Lea County, New Mexico.

It is anticipated that the water injected through the injection well will be co-mingled for the flooding of the upper and lower Seven Rivers Formations in the Jalmat and Langie Mattix Pools and that the production from the producing wells will be co-mingled in the well bore for the production from said pool. or

In the alternative, if such co-mingling is not authorized, to dually complete the injection and producing wells as to the upper and lower Seven Rivers Formations in said pools, through parallel strings of tubing.

In further support of said application, the following data is submitted:

1. The proposed injection well is applicant's well No. 42 located in Unit A of said Section 4.

2. The injection into the upper Seven Rivers Formation will be made through the perforated interval between 3,650 feet to 3,665 feet and the perforated interval between 3,670 feet to 3,784 feet.

3. The injection into the lower Seven Rivers Formation will be in the perforated interval between 3,718 feet and 3,738 feet.

4. The water for the proposed waterflood project will be furnished by Conoco from the Capitan Reef. The water will be injected under pressure at an anticipated initial rate of between 200 and 400 barrels per day.

5. The producing wells to be affected by the pilot project are as follows:

a. Texas Pacific Oil Company, Inc.,
Well No. 44 located in Unit B.

b. Texas Pacific Oil Company, Inc.,
Well No. 87 located in Unit G.

c. Texas Pacific Oil Company, Inc.,
Well No. 45 located in Unit H.

All in Section 4, Township 23 South, Range 36 East,
Lea County, New Mexico.

6. The aforesaid wells are in a declining rate of production and the granting of this application will allow applicant to obtain its fair share of oil from the reservoir will protect correlative rights and prevent economic waste caused by the premature abandonment of said wells.

WHEREFORE, Applicant requests the Commission to set

this matter down for hearing before its Examiner, on the 19th day of June, 1974, to publish its notice as provided by law, and after hearing, to issue its order authorizing the pilot waterflood project as prayed for herein.

Respectfully submitted,
TEXAS PACIFIC OIL COMPANY, INC.

By John D. Russell
P. O. Drawer 640
Roswell, New Mexico 88201
Attorney for Applicant

DATED: June 6, 1974

AFT

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. 5258

Order No. R-4819

APPLICATION OF TEXAS PACIFIC OIL
COMPANY FOR TWO WATERFLOOD PROJECTS
AND DOWNHOLE COMMINGLING, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 19, 1974,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of July, 1974, 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, Texas Pacific Oil Company, seeks
authority to institute two waterflood projects in its State "A"
lease, Jalmat Oil and Langlie Mattix Pools, by the injection
of water into the ~~K&M~~ Upper Seven Rivers and Lower Seven Rivers
formations, respectively, through ~~one injection well~~ ^{its State A A/c. 1 well No 42 located in} Section 4,
Township 23 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to complete the proposed injection well as a single completion and to determine the volumes of injected fluid to be credited to each zone by means of periodic spinner or other surveys.

(4) That the applicant seeks authority to complete its State "A" ~~Ac. 1~~ ^{respective} Wells No. 44 and No. 45 located in Units B and H of said Section 4 in such a manner as to produce oil from the Jalmat Oil Pool and oil from the Langlie Mattix Pool commingled in the same wellbore.

(5) That the applicant should determine a formula for allocation of the commingled production ^{from said wells No 44 and 45} in cooperation with the supervisor of the Commission's Hobbs district office.

(6) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(7) That the proposed waterflood projects should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(8) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texas Pacific Oil Company, is hereby authorized to institute two waterflood projects in its State "A" ~~Ac. 1~~ lease, Jalmat Oil and Langlie Mattix Pools, by the injection of water into the Upper Seven Rivers and Lower Seven Rivers formations, respectively, in applicant's State "A" ~~Ac. 1~~ Well No. 42 located in Unit A of Section 4, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico;

PROVIDED HOWEVER, that injection into said well shall be through internally coated 2 3/8-inch tubing set in a packer ~~set~~ at approximately 3600 feet; that the casing-tubing annulus shall be loaded with an inert fluid and be equipped with an approved leak detection device;

PROVIDED FURTHER, that spinner surveys shall be taken at least once each month for the first six months of active injection and at least once each four months thereafter in order to properly allocate the injected volume to the respective pools being flooded and that the results of each such survey shall be filed with the Hobbs district office of the Commission with Commission Form C-120.

(2) That the subject waterflood projects are hereby designated the Texas Pacific Oil Company ^{Jalmat} State "A" and Texas Pacific Oil Company Langlie Mattix State A Waterflood Projects and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) That the applicant is hereby authorized to complete its State "A" ~~Ac 1~~ Wells No. 44 and No. 45 located in Units B and H, respectively, of said Section ~~26~~ ⁴ in such a manner as to produce oil from the Jalmat Oil Pool and oil from the Langlie Mattix Pool commingled in the same wellbore.

(5) That before commencing any operations to complete, treat, or workover the Jalmat oil zone and/or the Langlie Mattix zone in either or both of said Wells No. 44 and No. 45, the applicant shall contact the supervisor of the Commission's Hobbs district office and formulate such plans and procedures as may be necessary and required to determine a formula for the allocation of the commingled production.

-4-

Case No. 5258
Order No. R-

(6) That no injection shall be permitted in the subject projects until the formula in Order (5) above has been ~~determined, filed with, and~~ approved by the Santa Fe office of the Commission.

(7) 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.

Application of Texas Pacific Oil Company for two waterflood projects and ~~a~~ down hole commingling or three dual completions, ~~in~~ Lea County, New Mexico. Applicant in

the above-styled cause, ~~seeks~~ seeks authority to ~~institute~~ ^{dual complete} its two waterflood projects by injection of water into the upper Seven Rivers formation, Jalmat Pool, and lower Seven Rivers formation, Langlie-Matrix Pools, through said well.

7" State of NCT 1 Well No 42, located in Unit B, Jalmat and Langlie Matrix Pools, Lea County, New Mexico.

Section 4, Township 23 South, Range 36 East, and to

Applicant further seeks approval for the down hole commingling in the well bore of Jalmat and Langlie Matrix oil production, in its State of NCT 1 wells Nos. 44, 45, and 87, located in units B, H, and G, respectively, and ~~Section 4, Township 23 South, Range 36 East, Lea County, New Mexico,~~ or in the alternative, approval of the dual completion of said wells to produce oil ~~to~~ from said pools through ~~parallel~~ parallel strings of tubing.