CASE 5489: TEXAS PACIFIC OFL CO., INC. FOR A WATERFLOOD EXPANSION, LEA COUNTY, NEW MEXICO

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CASE 110. 5489Application, Trans cripts, Small EXhibts 

## BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico May 28, 1975

## EXAMINER HEARING

Application of Texas Pacific Oil Co.	Case No. 5488
Lea County, New Mexico,	
and	and
Application of Texas Pacific Oil Co., Inc., for a waterflood expansion, Lea County, New Mexico.	Case No 5489
BEFORE: Richard L. Stamets, Examiner.	
	2

APPEARANCES

For the Applicant:

John F. Russell, Esq. 412 Hinkle Building Roswell, New Mexico 88201

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CASES 5488-5489

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# EXHIBITS

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 TP's	Exhibits	Nos.	1 through 8	<b></b>	12

MR. STAMETS: Call Case 5488, being Application of Texas Pacific Oil Co. for pool contraction and extension, Lea County, New Mexico.

MR. RUSSELL: John F. Russell, Roswell, New Mexico, appearing on behalf of the Applicant, Texas Pacific Oil Co., Inc. I have one witness.

MR. STAMETS: Any other appearances in this Case?

MR. RUSSELL: Mr. Examiner, may we consolidate this Case with 5489 for purpose of testimony?

MR. STAMETS: If there is no objection the two cases will be consolidated. Case 5489 is the Application of Texas Pacific Oil Co., Inc., for a waterflood expansion, Lea County, New Mexico.

The Witness will stand and be sworn, please.

(Witness sworn.)

ALLEN O. 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, name of your employer, and the capacity in which you are employed? THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 992-6386

#### WICKE-DIRECT

A I'm Allen Wicke with Texas Pacific Oil Company; I live in Midland, Texas, and work with Texas Pacific as a Petroleum Engineer.

Q And you have previously qualified to give expert testimony before this Commission, have you not?

A I have.

Q And you are familiar with the Applications of Texas Pacific Oil Company, Inc., in both Cases 5488 and 5489, are you not?

A Yes.

Q One is for 5489 is for waterflood expansion in Lea County, 5488 is for pool contraction and extension in Lea County, is that correct?

A That's correct.

Q In connection with these Applications have you prepared some exhibits?

A Yes, I have.

Q I will refer you to what has been marked as Applicant, or TP Exhibit No. 1, and ask you to explain what is reflected on this Exhibit in connection with these Applications.

A Exhibit No. 1 is a plat of the area in question. The area colored in yellow represents a portion of our

State "A" Account 1 Lease.

Q Now, does this reflect the proposed expansion of your waterflood, and if so, describe the location and well designation for both your injection wells and your production wells.

A Yes. Our proposed expansion of the Langlie Mattix waterflood is represented in the red outline and the proposed injection well is Well No. 47, Unit K, and Well No. 63 in Unit I of Section 3, and Well No. 84 in Unit G of Section 23, red triangles represent them -the proposed injection wells.

Q Does this Exhibit also reflect the offsetting floods?

A Yes. There are several floods offsetting our proposed waterflood expansion of this. Atlantic Richfield operated Seven Rivers-Queen Unit offsets . Our proposed injection well is 47 and 63 immediately to the north, and the Continental-operated Langlie Lynn Unit offsets our proposed injection well No. 84 immediately to the south, and there are other waterfloods in the area. Q Now, referring you to Exhibit No. 2, 3, and 4; what are they?

A These three exhibits are logs of our proposed THE NYE REPORTING SERVICE STATE-wide DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386

injection wells. Exhibit No. 2 is the log of Well No. 47, Exhibit 3 the log of Well 63, Exhibit 4 a log of Well No. 84. On the logs I have marked all the pertinent data, including tops of zones, estimated gas-oil contacts and oil-water contacts, and perforations, either present or proposed.

Q Did you give the location of the injection wells and the production wells, other than referring to them on the Exhibit? If not, will you locate them by Unit?

A The production wells?

Q Production wells from your Application and also the injection wells you propose?

A I think I pointed out the --

Q (Interrupting) I'm just trying to get them located.

A Okay. Our three proposed -- well, first, in Section 3 we are proposing two injection wells, Well No. 47 in Unit K and Well No. 63 in Unit I, and the producing wells associated with these injectors are Well No. 46 in Unit L, 43 in Unit N, 48 in Unit N, 64 in Unit O, and 69 in Unit P, and did I mention 63 in

Unit J.

Q

All right. Now, I refer you -- go ahead.

Α.

CASES 5488-5489 Page......7

A In Section 23 we are proposing a injection, which is in Unit G, and the producing wells associated with this injecture are Well No. 73 in Unit C, 98 in Unit D, 109 in Unit A, 27 in Unit F, and 105 in Unit H.

Q And that's all of them?

That's all.

Q Okay. Now I refer you to what has been marked as TP Exhibits 5, 6, and 7, and ask you what they are?

A These three exhibits are wellbore sketches of the proposed injection wells.

Q And each Exhibit shows the total depth of each well, the cementing program, tops of cement, casing size, and perforations, do they not?

A Correct. We show on all three exhibits perforations which are presently existing and proposed perforations if any, and also we show how we propose to complete the wells as injectors.

Q And how do you propose to complete them? For example, I refer you to Well No. 47 and the schematic on it.

A Yes, sir.

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Q Where is your plastic-coated tubing and so forth? THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 87501 TEL. (505) 982-0386

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A Okay. We would set 2-3/8th-inch plastic-coated
 tubing and a tension packer at approximately 3600 feet.
 Q And then how about Well No. 63, what is your
 proposed completion there?

A First of all we would squeeze off the present perforations and drill out the bridge plugs and we'd set 2-3/8th-inch plastic-coated tubing on tension packer at approximately 3620 feet.

Q And also this is injection through plasticcoated tubing, is it not?

A Correct.

Q And it indicates that bridge plugs will be set at 3635 feet?

A No, there is presently a bridge plug there.

Q That is presently there?

A And we would drill it out prior to injection.

Q All right. Now, referring to what has been marked as TP Exhibit No. 8, I ask you to explain to the Examiner what this particular exhibit reflects and the testimony on this is directly directed to Case No. 5488.

A Yes. Exhibit 8 is a cross section through the area that we are proposing to -- we're asking the Commission to revise the pool vertical limits on. This cross THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO 07501 TEL. (505) 982-0386

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section runs -- starting on the west side it takes in Well No. 96, which was a dry hole in Unit C of Section 4 -and it runs east through Well 42 in Unit A and south to Well 45, Unit H, and southeast to Unit L in Section 3. From there it goes east up through Well 63 which is in Unit I of Section 3. On this cross section I have marked in heavy solid lines the top of Seven Rivers and the base of the Seven Rivers. Now, the heavy dashed line, which is 100 feet above the base of the Seven Rivers, represents the present top of the Langlie Mattix interval.

Also marked on the cross section is a red line at minus 150 subsea, which represents our estimate of the gas-oil content in the field, and the blue line at minus 270 feet subsea represents our estimate of the water-oil content in this area of the field. I would like to point out that the separation between these two lines is only 120 feet, which represents the growth section which is available to the production of oil, but the heavy solid line again, which represents the upper limit of the Langlie Mattix Pool, essentially runs midway between these two lines, so this reduces our interval to produce oil from -- it reduces the interval to about 60 feet as far as the Langlie Mattix Pool oil section. THE NYE REPORTING SERVICE STATE-WIGE DEPOSITION NOTARIES

225 JOHNON STREET SANTA FE, NEW MEXICO 67501 TEL. (505) 982-0386

# CASES 5488-5489 Page 10

Q Now, on the basis of this Exhibit, what specifically are you asking the Commission to do in connection with these pool limits?

A As to the N/2 of the NE/4 in the SE/4, and the SE/4 of the NE/4 of Section 4, Township 23 South, Range 36 East, we're asking that the pool limits be revised by deleting from the Jalmat gas formation the lower 160 feet of the Seven Rivers and to concurrently extend the vertical limits of the Langlie Mattix Pool to include the lowermost 160 feet of the Seven Rivers Formation, and as to the NW/4 of the SW/4 of Section 3, Township 23 South, Range 36 East, we are asking that the lowermost 135 feet of the Seven Rivers formation be deleted from the Jalmat Gas Pool and that the Langlie Mattix Pool be concurrently extended to include the lowermost 135 feet of the Seven Rivers.

Q Has a similar application in the same pool been approved by the Commission?

A Yes. The vertical limits between the Jalmat Gas and the Langlie Mattix Oil Pool were revised for the Langlie-Jal Unit, which is operated by Union Texas Petroleum. The revision here was to delete the entire Seven Rivers formation from the Jalmat Gas and to include it

CASES 5488-5489 Page 11

into the Langlie Mattix for most of the unit area.

Q In your opinion will the granting of the two Applications prevent waste and protect correlative rights?

A' Yes.

Q And were Exhibits 1 through 8 prepared by you or under your direction and supervision?

A Yes. I would like to elaborate further on Exhibit 8 if I might.

Okay.

Q

А The weaker dashed line on the Exhibit, which essentially coincides with the red line on most of the cross section, represents the new upper limit of the Langlie Mattix Pool which, upon approval of our Application, will end, and in this case it would place all the oil sands within the Langlie Mattix Pool. I would also like to point out that there are two gas wells which fall into the area that we're requesting this provision: The first one is the second well from the left on the cross section, which is Well No. 23 in Unit P, Section 4, and as is evident on the cross section, this well is completed entirely in the Yates formation, so there would be no interference from our producing the lowermost 160 feet of the Seven Rivers here as an oil zone. The other

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CASES 5488-5489 12 Page

gas well is Well No. 35, which is in Unit L of Section 3. With this we're asking for the lowermost 135 feet of the Seven Rivers to be included into the Langlie Mattix. This particular well was drilled down to within a few feet of the gas-oil contact, but it did not penetrate the uppermost zone, which would fall within the Langlie Mattix Pool then upon approval of our Applications, so there would be no interference with this gas well either.

Q Is there anything further you would like to point out on that Exhibit or any others that you have gone through?

A I would just like to point out here again the narrow Morrow interval we have here of 135 feet and the proximity to the gas zone and also to the water zone. We're going to have a pretty difficult flood as it is and we feel like our Application is reasonable.

Q Were Exhibits 1 through 8 prepared by you? A Yes.

MR. RUSSELL: At this time I would like to introduce TP's Exhibits 1 through 8.

MR. STAMETS: These Exhibits will be admitted into evidence.

(Whereupon, TP's Exhibits

WICKE-CROSS

### CASES 5488-5489 Page......13

1 through 8 were admitted into

evidence.)

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

#### CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Wicke, referring back to Exhibit No. 1, now, the Application in this Case is for water flood expansion. If I interpret this Exhibit properly, the only actual injection incurring at this time is in Well No. 42 in Unit A of Section 4, is that correct?

A Well, this injection was permitted by our previous -- by Order No. R-4819, but it has not yet been converted to injection.

Q I see. With the expansion of an approved project there?

A Right.

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Q Another of the wells that you propose, though, is Well No. 84 down in Section 23, which is 2-1/2 miles or so away from Wells No. 47 and 63 which you propose and probably 3 miles away from the original injection well. That's kind of a long way to go for an expansion, isn't

WICKE-CROSS REDIRECT

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CASES 5488-5489 Page 14

A Well, Continental has asked us to cooperate.
 They are injecting into Well No. 3, which is in - Q (Interrupting) So, this is an expansion of
 your -- what is this -- State "A" Account 1?

Langlie Mattix State "A" flood.

Q But in actuality this Well No. 84 might be a new flood as far as TP is concerned rather than an expansion?

A Right. It is remote from the rest of the flood. MR. RUSSELL: May I ask a question?

#### REDIRECT EXAMINATION

BY MR. RUSSELL:

Q Are there plans and discussions underway for the flood of the entire lease?

A Yes. In fact we have underway a unitization proceeding in which we are trying to unitize most of the area, as shown within this plat essentially between the units on the north and the Meyer's Langlie Mattix Unit on the south. Our full-scale water flood would follow a unitization of this area.

MR. RUSSELL: No further questions.

WICKE-RECROSS

CASES 5488-5489 Page 15

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## RECROSS EXAMINATION

BY MR. STAMETS:

Q What you are doing now is simply injecting as an offset to protect your leases?

A Right.

Q In each of the injection wells, which are shown on the Exhibits 5, 6, and 7, you propose to load the annular space and guage this, or put some sort of a tension-tracking leak-detection devise on the annular space?

A Right. We would follow all Commission rules in that regard.

Q Your field personnel would be alert to leaks of water on the surface from around injection wells or from around producing wells?

A Yes, sir.

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Q And report these to the Commission? A Yes.

Q You mentioned the Langlie-Jal Unit taking in the entire Seven Rivers formation, and in this case you propose to take in only 160 feet in one case and 135 in another. I would assume in looking at your Exhibit No. 8 that the reason for that is to include only the oil THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SANTA FE, NEW MEXICO #7501 TEL. (505) 982-0386 WICKE-RECROSS

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zone in the Seven Rivers in the Langlie Mattix in this area?

A That's correct.

Q I'm sure that you recognize that this could become an administrative problem for the Commission, dealing with a pool limit that varies radically from place to place and in the County?

A Well, yes, it has that potential.

MR. STAMETS: Any other questions of this Witness? He may be excused. Anything further in this Case?

> MR. LYON: Could I make a statement? MR. STAMETS: Yes.

MR. LYON: I'm V.T. Lyon, Continental Oil Company, and I would like to mention that both of these wells are offsetting units which are operated by Continental Oil Company. In regard to the well in Section 4, the vertical limits involved there -- this is a cooperative well with our South Eunice Unit, in which the unitized area, the unitized interval, includes both the south units and part of the Jalmat. We have requested Texas Pacific to cooperate with us in placing their well on injection in the same intervals that we are THE NYE REPORTING SERVICE STATE-WIDE DEPOSITION NOTARIES 225 JOHNSON STREET SAMTA FE, NEW MEXICO 87501

TEL. (505) 982-0386

flooding in that unit, and we would respectfully request that the Commission approve their Application.

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MR. STAMETS: Does anybody else have anything to offer in the subject cases? If not, they will be taken under advisement.

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

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CASES 5488-5489 

STATE OF NEW MEXICO COUNTY OF SANTA FE

Section Swith

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.

Reporter

Court NYE, RICHARD L.

1 do horoby certify that the foregoing in a complete record of the proceedings in the Examiner hearing of Case No. 2 8

Exeminer Mexico Oil Conservation Commission

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#### 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. 5489 Order No. R-4819-A

APPLICATION OF TEXAS PACIFIC OIL CO., INC., FOR A WATERFLOOD EXPAN-SION, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 28, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>17th</u> day of June, 1975, 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, Inc., seeks approval for the expansion of its Jalmat State "A" and/or its Langlie Mattix State "A" waterflood projects, Jalmat and Langlie Mattix Pools, by the injection of water into the Seven Rivers and Queen formations through its State "A" Wells Nos. 47 and 63 located, respectively, in Units K and I of Section 3 and its State "A" Well No. 84, located in Unit G of Section 23, all in Township 23 South, Rarge 36 East, Lea County, New Mexico.

(3) That the proposed injection is to be into the Seven Rivers and Queen formations of said Langlie-Mattix Pool only.

(4) That the mechanics of the proposed injection wells are feasible and in accord with good conservation practices.

(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) That injection into said State A Wells Nos. 47 and 63 constitutes a legitimate expansion of applicant's Langlie-Mattix State A Waterflood Project which project was authorized by Commission Order No. R-4819, dated June 19, 1974. -2-Case No. 5489 Order No. R-4819-A

(7) That while said State A Well No. 84 is located on the same basic lease with the wells described in Finding (6) above, it is separated from them by a distance of approximately 2 3/4 miles.

(8) That injection into said State A Well No. 84 will result in the initiation of new waterflood project on applicant's State A lease, Langlie-Mattix Pool, Lea County, New Mexico.

(9) That expansion of applicant's Langlie-Mattix State A Waterflood Project and creation of second Langlie-Mattix Waterflood project on applicant's State A lease should result in the recovery of hydrocarbons which would otherwise not be recovered, thereby preventing waste.

(10) That the subject application should be approved and the projects 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, Inc., is hereby authorized to expand its Langlie-Mattix State A Waterflood Project by the injection of water into the lower Seven Rivers and Queen formations through the following-described wells in Section 3, Township 23 South, Range 36 East, NMPM, Langlie-Mattix Pool, Lea County, New Mexico:

LEASE NAME			WELL NO.	5	UNIT LETTER
State A		С.	47	х	ĸ
State A	· · · ·		63		I

(2) That the applicant, Texas Pacific Oil Company, Inc., is further authorized to institute a second waterflood project on its State A Lease, Langlie-Mattix Pool, by the injection of water into the lower Seven Rivers and Queen formations through its State A Well No. 84, located in Unit G of Section 23, Township 23 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation or, in the case of open-hole completions, the casing shoe; that any perforations above the packer shall be squeezed; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attentionattracting leak detection device.

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the -3-Case No. 5489 Order No. R-4819-A

leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the waterflood project authorized under Order (2) above is hereby designated the Texas Pacific Oil Company Langlie Mattix State A Waterflood Project No. 2 and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(6) 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.

(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

R. TRUJILLO, Chairman

rero PHIL R. LUCERO Member

JOE D. RAMEY, Member & Secretary

jr/

SEAL



#### **OIL CONSERVATION COMMISSION**

STATE OF NEW MEXICO P. O. BOX 2088 · SANTA FE 87501 June 17, 1975 I. R. TRUJILLO CHAIRMAN

LAND COMMISSIONER PHIL R, LUCERO MEMBER

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

Re: CASE NO. 5489 ORDER NO. R-4819-A

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

Applicant:

Texas Pacific Oil Co., Inc.

#### Dear Sir:

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

Yours very truly, JOE D. RAMEY Secretary-Director

JDR/fd

Copy of order also sent to:

Hobbs OCC X Artesia OCC Aztec OCC

Other\_\_\_



TEXAS PACIFIC OIL COMPANY, INC. STATE "A" ACCT. 1 WELL NO. 63 SEC. 3, T-23-S, R-36-E 1980' FSL & 660' FEL LANGLIE MATTIX POOL LEA COUNTY, NEW MEXICO COMPLETION DATE: 8/17/59 COMPLETION DATE: 8/17/59 Elevation: 3466' GL Measurement Datum: 3476' 9 5/8" casing set @ 322' w/300 sx. cmt. Cement circulated. Top of Cement @ 1920' Propose to squeeze cement present perforations, drill out bridge plug, deepen to 3700' and place on injection in open hole interval through 2 3/8" plastic-coated tubing with tension packer set 0 approximately 3620'. Perforations 3446'-3609' Bridge plug @ 3635' 7" casing set @ 3654' w/250 sx. cmt. TD: 3691' T. P. Ex. 6



No. 8 5 4 160



TELEPHONE 622-4641

AREA CODE 505

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

LAW OFFICES OF

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April 29, 1975

Mr. A. L. Porter, Jr. Secretary - Director 0il Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

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Dear Mr. Porter:

I transmit herewith, in duplicate, two applications of Texas Pacific Oil Co., Inc. It will be appreciated if these two cases are consolidated for the purpose of hearing and set down before the examiner at the regular hearing on May 28, 1975.

Respectfully yours,

John F. Russell John Kusse

JFR:jb Enclosures

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#### BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa

IN THE MATTER OF THE EXPANSION OF TEXAS PACIFIC OIL COMPANY'S WATER FLOOD PROJECT IN ITS STATE "A" ACCOUNT ONE LEASE COVERING THE JALMAT OIL AND LANGLIE MATTIX POOLS.

Case No. 5489

#### APPLICATION

COMES NOW John F. Russell, Attorney for Texas Pacific Oil Company, Inc., and respectfully requests the Commission to expand its pilot water flood in the Langlie Mattix Pool to include the S½ of Section 3, and the NE¼ and the E½NW¼ of Section 23, all in Township 23 South, Range 36 East, Lea County, New Mexico.

1. Applicant proposes to commence injection for secondary recovery into its Well No. 47 located in Unit K and its Well No. 63 located in Unit I of Section 3, Township 23 South, Range 36 East.

2. Applicant proposes to produce through the following wells:

T. P. Well No. 43 located in Unit M;
T. P. Well No. 46 located in Unit L;
T. P. Well No. 48 located in Unit N;
T. P. Well No. 61 located in Unit J;
T. P. Well No. 64 located in Unit O;

T. P. Well No. 69 located in Unit P;

all in Section 3, Township 23 South, Range 36 East, Lea County, New Mexico.

3. To inject into its Well No. 84 located in Unit G and to produce through the following wells:

T. P. Well No. 27 located in Unit F;

T. P. Well No. 73 located in Unit C;

T. P. Well No. 98 located in Unit B;T. P. Well No. 105 located in Unit H;

T. P. Well No. 109 located in Unit A

all in Section 23, Township 23 South, Range 36 East.

DATED:

4. That the granting of this application will provide a more efficient water flood operation and enable applicant to recover its fair share of the oil under said tracts tithout impairing correlative rights or creating waste.

WHEREFORE, Applicant prays that this matter be set down for hearing before its examiner and that the relief requested herein be granted.

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Respectfully submitted, TEXAS PACIFIC OIL COMPANY, INC.

in F. Russell O. Box 640 р

Roswell, New Mexico 88201 Applicant's Attorney

#### BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE EXPANSION OF TEXAS PACIFIC OIL COMPANY'S WATER FLOOD PROJECT IN ITS STATE "A" ACCOUNT ONE LEASE COVERING THE JALMAT OIL AND LANGLIE MATTIX POOLS.

5489 Case No.

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all in Section 3, Township 23 South, Range 36 East, Lea County, New Mexico.

3. To inject into its Well No. 84 located in Unit G and to produce through the following wells:

T. P. Well No. 27 located in Unit F;

T. P. Well No. 73 located in Unit C;

-1-

T. P. Well No. 98 located in Unit B;

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-2-

Respectfully submitted, TEXAS PACIFIC OIL COMPANY, INC.

By Russel:

P 0. Box 640 Roswell, New Mexico 88201 Applicant's Attorney -2-Case No. 5489 Order No. R-4819-A

(3) That the proposed injection is to be into the Seven Rivers and Queen formations of said Langlie-Mattix Pool only.

(4) That the mechanics of the proposed injection wells are feasible and in accord with good conservation practices.
(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) That injection into said State A Wells Nos. 47 and 63 constitutes a legitimate expansion of applicant's Langlie Mattix State A Waterflood Project Mhich project was authorized by Commission Order No. R-4819, dated June 19, 1974.

(7) That while said State A Well No. 84 is located on the same basic lease with the wells described in Finding (6) above, it is separated from them by a distance approximately 2 3/4 miles.

(8) That injection into said State A Well No. 84 will result in the initiation of new waterflood project on applicant's State A lease, Langlie Mattix Pool, Lea County, New Mexico.

(9) That expansion of applicant's Langlie Mattix State A Waterflood Project and creation of second Langlie Mattix Waterflood project on applicant's State A lease should result in the recovery of hydrocarbons which would otherwise not be recovered, thereby preventing waste.

(10) That the subject application should be approved and the projects 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/Company, Inc., is hereby authorized to expand its Langlie Mattix State A Waterflood Project by the injection of water into the lower Seven Rivers and Queen formations through the following-described wells in Section 3, Township 23 South, Range 36 East, NMPM, Langlie-Mattix

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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. 5489

Order No. R- 4819-A

APPLICATION OF TEXAS PACIFIC OIL CO., INC., FOR A WATERFLOOD EXPANSION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on <u>May 28</u>, 1975 at Santa Fe, New Mexico, before Examiner <u>Richard L. Stamets</u>

NOW, on this <u>day of June</u>, 1975, 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, Inc., seeks approval for the expansion of its Jalmat State "A" and/or its Langlie Mattix State "A" waterflood projects, Jalmat and Langlie Mattix Pools, by the injection of water into the Seven Rivers and Queen formations through its State "A" Wells Nos. 47 and 63 located, respectively, in Units K and I of Section 3 and its State "A" Well No. 84; located in Unit G of Section 23, all in Township 23 South, Range 36 East, Lea County, New Mexico. -3-Case No. 5489 Order No. R-4819-A

Pool, Lea County, New Mexico: LEASE NAME WELL NO. State A 47

State A

(2) That the applicant, Texas Pacific Oil Co., is further authorized to institute a second waterflood project on its State A Lease, Langlie Mattix Pool, by the injection of water into the lower Seven Rivers and Queen formations through its State A Well No. 84, located in Unit  $G_A$  Section 23, South, Range 36 East, NMPM, Lea County, New Mexico.

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(3) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation or, in the case of open-hole completions, the casing shoe; that any perforations above the packer shall be squeezed; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attentionattracting leak detection device.

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the waterflood project authorized under Order (2) above is hereby designated the Texas Pacific Oil Company Langlie Mattix State A Waterflood Project No. 2 and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(6) 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

UNIT LETTER

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-4-Case No. 5489 Order No. R-4819-A

Regulations.

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(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.