<u>CASE 3905</u>: Application of TEXAS PACIFIC OIL COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY.

appl Texas Pacific Oil Co Eispore of S. Crownerd DEU in State "O" WEED no 1 lac J- 15-105-36E 1980' FS & E Quies open hore +2259 -12-2-4-Wevonian meter decenter 250-12269-12541 12-271 ~~?. h-() ~ DOCKET MAJLED Oak fice sell 17 - gradienter Date 10-11-68

<u>CASE 3905</u>, Application of TEX PACIFIC OIL COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY.

Case Number 2905Application Transcripts. Small Exhibits E / C

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico October 23, 1968 dearnley-meier reporting service, inc. 1120 SIMMS BIDC. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUEROUE, NEW MEXICO EXAMINER HEARING IN THE MATTER OF: Application of Texas Pacific) Oil Company for salt water disposal,) Case No. 3905 Lea County, New Mexico.) BEFORE: Daniel Nutter, Examiner TRANSCRIPT OF HEARING

MR. NUTTER: We will call Case 3905.

MR. HATCH: Case 3905, Application of Texas Pacific Oil Company for salt water disposal, Lea County, New Mexico. MR. RUSSELL: John F. Russell, of Roswell, New Mexico, appearing on behalf of the applicant. I have one witness. (Whereupon, Applicant's Exhibits Numbers 1 through 5, inclusive, were marked for identification.)

RON FREELS

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

Will you please state your name, your residence, and BY MR. RUSSELL: your employer, and the capacity in which you are employed? My name is Ron Freels. I work for Texas Pacific Oil Company as assistant to the vice president, production department,

You have previously qualified to give expert testimony in Dallas. Ò

before the Commission, have you not?

Are you familiar with the application of Texas Pacific А Q

Oil Company in Case No. 3905?

I am. Α

What do you seek by this application? Q

A Texas Pacific seeks permission to use its State O Well No. 1 in the -- located 1980 feet from the south and east lines of Section 15, Township 10 South, Range 36 East, in the South Crossroads Devonian Field, Lea County, New Mexico, as a salt water disposal well.

Q Now, I'll refer you to what has been marked as Exhibit Number 1 and ask you to explain that to the Examiner.

A Exhibit 1 is a map of the South Crossroads Area showing all of the wells in the South Crossroads Devonian Field. The well that we propose to use as a salt water disposal well is colored in red on the map, the legend at the bottom shows that the solid dots are the producing wells in this area. All of the wells produce from the Devonian Formation.

Q And you are seeking to dispose of the produced water back to the Devonian Formation, is that correct?

A That is correct.

₹D,

Q (Now, initially, what well is this salt water disposal well to serve?

A This well is to initially serve as a disposal well for the water produced from the Texas Pacific Oil Company's State A. C. Well No. 1.

Q But you are also, as I understand it, going to offer this facility to the other producers from this formation in the pool if they so desire?

A That is correct. Q What is the present water production of your well

you just identified? A The initial rate of injection of our well will be approximately 800 barrels of water per day. All the wells in the field under the system would be approximately 1000 barrels the field under the present time. This will increase just of water per day at the present time. This will increase just a bit over the life, it could run as high as 50 to 60,000 barrels

of water per month. Q Now, I'll refer you to what has been marked Exhibit 2 and ask you to identify and explain that exhibit. A Exhibit Number 2 is a schematic proposed salt water disposal well. The exhibit shows that the well has 13 and threeeighths casing, set at 333 feet, cemented with 300 sacks of cement, the cement circulated to the surface. The well has 9 and five-eighths inch casing set at 4,260 feet, cemented with 425 sacks, circulated top of the cement is 3,100 feet. The well has seven-inch casing, cemented into the top of the Devonian Formation at 12,269 feet, cemented with 300 sacks. The calculated type of cement of 10,103 feet. The well is presently of total depth of 12,291 feet.

Q Now, in your application you have asked for permission to inject into through open holes to the intervals of 12, 2, 6, 9 and 12, 5, 4, 1, the latter depth being deeper than the present depth of the well, is that correct?

A That is true. Our intention is to inject into the portion of the open hole that is open now, provided the well will not take the volume required on vacuum. We request permission to deepen an addition of 250 feet. Based on other logs in the area, the porosity increases with depth. This will still be within the Devonian Formation. I failed to mention one additional thing. This schematic shows that we plan to inject down tubing set into a model packer set at 12,105 feet. We have noted that there will be two and three-eighths inch tubing used; however, depending on the final volumes of water we inject, we may decide to use larger tubing sizes.

5

Q What size, do you know?

A It could be either two and seven-eighths, or three and a half inch.

Q That's COD?

A That's COD, right.

Q And what type of tubing are you planning to use?

A We plan to internally coat our tubing, and we will load the annulus with inhibited fluid and will install a valve at the surface, or a pressure gauge.

Q I'll refer you to what has been marked Exhibit No. 3, and ask you to identify it.

A Exhibit No. 3 is an electrical log of our State O No.1

which is the well we plan to use for salt water disposal well, and on this log we have marked at the bottom of it 12,269 feet indicated the top of the Devonian Formation.

6

Q All right. I'm referring to what has been marked as Exhibit 4. What is that?

A Exhibit 4 is a production performance graph of State O Well No. 1. This well is off production, has been off production since February of this year. At that time, the well was producing 30,000 barrels of water per month, approximately a thousand barrels of oil per month, and was declining very rapidly. This well is no longer economic to operate.

Q All right. I'll refer you to Exhibit Number 5, and ask you what that is.

A Exhibit Number 5 is a water analysis of the water from our State A. C. account one, which is representative, I'm sure, of the water being produced from all the Devonian wells in this area. This shows that the water has a chloride content of 35,500 parts per million.

Q And this water is being reinjected into the same formation from which it is produced, is that correct?

A That is right, and we don't anticipate any compatibility problems.

Q Are you certain at this time that you are going to use line tubing?

A We are uncertain exactly what lining we will use in the tubing at this time. However, based on further study, we will determine whether or not -- most likely it will be lined tubing. There are other alternatives, but we plan at this time on lining the tubing.

Q What would be one of the other alternatives?

A We could possibly inhibit the water being injected, but the volumes may make this prohibitive.

Q Were Exhibits 1 through 5 prepared by you or under your direction or supervision?

A They were.

Q I move the introduction, at this time, of Applicant's Exhibits 1 through 5.

MR. NUTTER:---Texas Pacific's Exhibits 1 through 5 will be admitted in evidence.

> (Whereupon, Applicant's Exhibits Numbers 1 through 5, inclusive, were admitted in evidence.)

Q One other question: how long do you anticipate the life of this disposal to be?

A This disposal will range somewhere in the order of five years, is our estimate for the life of the field.

MR. RUSSELL: I have no further questions of this witness.

produced down in our area. Of course, we would be pleased to accept water from that well. This is not our well, by the way, this north, it's Midland's production company.

This is still producing. Is it from the same reservoir? It is not It appears to be from the same reservoir. A producing anywhere near the volume of water that is being

one in the southwest southwest of 15, and one in Section 21, and Hubert has one well there in Section 22. Is this well way up in the north end of the pool in Section 10 still producing?

What is your method for production? We are using the Kobe system of I. N. Kobe. that well. Now, as I see from your Exhibit Number 1, Mr. Freels, Texas Pacific has one producing well, Ralph Lowe has two of them,

producing, what is it presently making in oil? Mr. Examiner, I cannot recall the exact rate. I'm thinking in the order of 60 barrels of oil per day. Eight hundred barrels of water. We anticipate there's somewhere in the order of 35,000 additional barrels reserve in

What is that well presently, the one that you are BY MR. NUTTER:

CROSS EXAMINATION

Q Isn't this a dry hole immediately south of it? A This was a gas well. This is oil horizons, by the way, wells under 2,000. As it turns out, the Devonian is the only well producing, or the only zones producing at this time.

Q When you were talking about possibly taking the water production from the other wells, were you including this Midland Production Company well up here?

A If they wish to bring the water, we would certainly be glad to take it. We have only at this time had preliminary discussions with Hubert and Ralph Lowe. They are very definitely interested.

Q They are down in the same end of the field with you? A Right. It would be strictly up to the Midland Production Company, if they would like to.

Q Now, Mr. Freels, normally our order specified that the tubing would be coated, so that the water would be continuously treated, and coupon tests run on the water. What should we specify in this case?

A Recommend that the tubing be coated. I feel this is the alternative we will prefer to take anyway.

Q You are not sure just yet what size tubing you will have to have?

A That's right. And until we know for sure what the other people are going to go into this system, of course, this

could change our minds; however, I feel that it will probably be two and seven-eighths inch tubing at this time. Plastic coated? Plastic coated, or internally coated. A

Q Yes.

MR. NUTTER: Are there any other questions of the witness? He may be excused. Do you have anything further, Mr. Russell?

MR. RUSSELL: I have nothing further, Mr. Examiner. MR. NUTTER: Does anyone have anything they wish to offer in Case No. 3905? The case will be taken under advisement.

INDEX

MARKED

2

THE WITNESS

RON FREELS

Direct Examination by Mr. Russell

Cross Examination by Mr. Nutter

OFFERED AND ADMITTED

7

EXHIBITS Applicant's Exhibits Numbers 1 through 5

11

PAGE

2

. 8

CERTIFICATE

STATE OF NEW MEXICO)) ss COUNTY OF BERNALILLO)

I, GLENDA BURKS, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

<u>Ilenda Burks</u> COURT REPORTER

X as hereby contains that the forecains is a president arroad of Will party states the the Interlate bearing of the 3905 bound by me on 10/23, 39 68

tures, Standar Now Hentles 011 Conversation Consciousion

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



STATE GEOLÒGIST A. L. PORTER, JR. Secretary - Director

P. O. BOX 2038 SANTA FE

October 31, 1968

Mr. John Russell Attorney at Law Post Office Drawer 640 Roswell, New Mexico 88201 Re: Case No. 3905 Order No. R-3542 Applicant:

Texas Pacific Oil Co.

Dear Sir:

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

Very truly yours,

Faiter

A. L. PORTER, Jr. Secretary-Director

ALP/ir

Carbon copy of drder also sent to:

Hobbs (0CC <u>×</u>		
Artesia	a occ		
Aztec	000		
Other	State	Engineer	Office

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. 3905 Order No. R=3542

APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 23, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st day of October, 1968, 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, is the owner and operator of the State "O" Well No. 1, located in Unit J of Section 15, Township 10 South, Range 36 East, NMPM, South Crossroads-Devonian Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the open-hole interval from approximately 12,269 feet to 12,541 feet.

(4) That the applicant proposes to initially inject through 2 3/8-inch tubing installed in a packer set at approximately 12,105 feet and to continuously treat the produced water prior to injection to prevent corrosion of said 2 3/8-inch tubing, and to later replace said 2 3/8-inch tubing with internally plastic-coated tubing of larger diameter.

-2-CASE No. 3905 Order No. R-3542

(5) That the casing-tubing annulus should be filled with an inert fluid and that a pressure gauge should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(6) That coupon corrosion tests should be conducted continuously on said well and the results thereof filed guarterly with the Commission until further notice from the Secretary-Director of the Commission.

(7) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texas Pacific Oil Company, is hereby authorized to utilize its State "O" Well No. 1, located in Unit J of Section 15. Township 10 South, Range 36 East, NMPM, South Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, initial injecproduced salt water into the Devonian formation, initial injecproduced salt water into the Devonian formation initial injecital initial injecproduced salt water initial injecital initial injecital initial injecital initial injecital

<u>PROVIDED HOWEVER</u>, that the produced salt water shall be continuously treated prior to injection to prevent tubing corrosion; that coupon corrosion tests shall be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretarywith the Commission; that the casing-tubing annulus Director of the Commission; that the casing-tubing annulus shall be filled with an inert fluid and that a pressure gauge shall be attached to said annulus in order to determine leakage in the casing, tubing, or packer.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

-3-CASE No. 3905 Order No. R-3542

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

STATE OF NEW MEXICO OL CONSERVATION COMMISSION m DAVID F. CARGO ð

irman

ber

GUATON B. HA PORTER, Jr., Member & Secretary

esr/

Docket No. 31-68

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 23, 1968 9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO The following cases will be heard before Daniel S. Nutter, Examiner, or Application of Signal Oil and Gas Company for a non-standard Elvis A. Utz, Alternate Examiner: oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a non-standard oil CASE 3894:

proration unit comprising the W/2 NE/4 and the N/2 SE/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsyl-Vanian Pool, Lea County, New Mexico, said unit to be dedicated Vanian rooi, Lea County, New Mexico, Salu unit to pe dedicat to its State AP Well No. 1 located 1980 feet from the South line and 660 feet from the East line of said Section 17. Application of Sun Oil Company for a pressure maintenance

CASE 3895:

project, Chaves County, New Mexico. Applicant, in the project, chaves county, New mexico. Appricant, in the above-styled cause, seeks authority to institute a pressure maintenance project in its New Mexico State "H" Lease by the injection of water into the San Andres formation through its New Mexico State "H" Well No. 13 located in the SE/4 SE/4 of Section 16, Township 8 South, Range 30 East, Cato-San Andres Pool, Chaves County, New Mexico. Applicant further seeks the promulgation of special rules to govern operation of said pressure maintenance project. (Continued from the October 9, 1968, Examiner Hearing)

CASE 3887:

Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seens authority to institute a waterflood project by the injection of water into the Premier sand of Grayburg formation through two wells to be located in Units E and K

of Section 12, Township, 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico. Applicant further proposes to produce oil from the Upper Grayburg through parallel strings of tubing, if said zones are productive in the

subject wells.

CASE 3896:

Application of Kersey & Hanson, Yates Drilling Company, and John H. Trigg for several waterflood projects, Eddy County, New Moving New Mexico. Applicants, in the above-styled cause, seek authority to institute several cooperative waterflood projects by the injection of water into the Queen and Grayburg formations through four injection wells located in Sections 21

October 23, 1968 - Examiner Hearing Page 2

Docket No. 31-58

CASE 3896 continued

and 28, Township 18 South, Range 29 East, Turkey Track Queen-Grayburg Pool, Eddy County, New Mexico

CASE 3897:

12......

44.1. M.

- 20 (H-1)

CASE 3898:

જુણ ગઢકો હતા

PALLE GHT

Generation

វិទ្មារដ្ឋទី១ សម្តារ ស

CASE 3899:

1 **3** 1

Lr i

better

120

(· · · ·

Application of Kersey-Wittkopp and E. A. Hanson, for two₁₃ waterflood projects, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to institute two cooperative waterflood projects by the injection of water into the Queen formation through two injection wells located in the NW/4 SE/4 and the SW/4 SE/4 of Section 6 Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.

Application of Tenneco Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water, into the Queen formation in the open-hole interval from approximately 3258 feet to 3341 feet in its Ginsberg-Federal Well No. 6 located in Unit E of Section 31, Township 25 South, Range 38 East, Langlie-Mattix Field, Lea County, New Mexico.

Application of Cities Service Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to dispose of produced salt water into the San Andres formation in the interval from approximately 4087 feet to 4176 feet in its State AD Wekb No. 8 located in Unit J of Section 22, Township 10 South, Range 32 East, Mescalero-San Andres Pool, Lea County, New Mexico.

Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to commingle production from the Vacuum Wolfcamp Pool and the North Vacuum Abo Pool in the well-bore of its State H-35 Well No. 7 located 660 feet from the North line and 1780 feet from the East line of Section 35, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 3901:

CASE 3900:

Application of Continental Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations in the perforated interval from approximately 3330 feet to 3552 feet in its Lynn A-28 Well No. 6 located in Unit H of Section 28 Township October 23, 1968 - Examiner Hearing Page 3

Docket No. 31-68

(CASE 3901 continued)

23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 3902:

Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to institute a pilot waterflood project by the injection of water into the Queen formation through its Stevens "B" Well No. 8 located in Unit A of Section 12, Township 23 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 3903:

3: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to institute a waterflood project by the injection of water into the Delaware formation in the perforated intervals from approximately 4675 feet to 4765 feet in its Payne Well No. 11 and from 4666 feet to 4740 feet in its Payne Well No. 12 located 660 feet from the South line and 1650 feet from the West line of Section 30, 1935 feet from the North line and 2090 feet from the West line of Section 31, respectively, Township 26 South, Range 33 East, El Mar-Delaware Pool, Lea County, New Mexico.

CASE 3904:

Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to institute a pilot waterflood project by the injection of water into the Delaware formation through its Thompson Federal 19 Well No. 2 located in Unit F of Section 19, Township 26 South, Range 32 East, North Mason-Delaware Pool, Lea County New Mexico.

CASE 3905:

Application of Texas Pacific Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from approximately 12,269 feet to 12,541 feet in its State "O" Well No. 1 located in Unit J of Section 15, Township 10 South, Range 36 East, South Crossroads-Devonian Pool, Lea County, New Mexico. October 23, 1968 - Examiner Hearing Page 4 Docket No. 31-68

CASE 3906: Application of Skelly Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through its Mattix "A" Well No. 4 located in Unit K of Section 2, Township 24 South, Range 37 East, Langlie-Mattix Oil Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 3907: Application of Skelly Oil Company for a waterflood project, Roosevelt County, New Mexico. Applicant, in the abovestyled cause, seeks authority to institute a pilot waterflood project by the injection of water into the San Andres formation through its Hobbs "W" Well No. 9 located in Unit F of Section 29, Township 7 South, Range 34 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 3908: Application of Pan American Petroleum Corporation for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 3932 feet to 4027 feet in its Miller Federal Well No. 4 located in Unit L of Section 35, Township 7 South, Range 31 East, Tom-Tom San Andres Pool, Chaves County, New Mexico.

<u>CASE 3909:</u> Application of Champlin Petroleum Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into San Andres formation, Chaveroo-San Andres Pool, Roosevelt County, New Mexico, through the following two wells located in Township 7 South, Range 33 East:

> Champlin Lauck-Federal Well No. 12, Unit J of Section 29; Disposal Interval -4202 feet to 4404 feet;

Champlin State 32-7-33 Well No. 5, Unit J of Section 32; Disposal Interval - 4303 feet to 4425 feet. unitadas 1837 (Leon - Brasiliador Sapadors) Pagu 5 Docket No. Sand

Application of Atlantic Richfield Company for compulsory peoling, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SW/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico, Said acreage to be dedicated to a well located in the NE/4 SW/4 of said Section 17.

<u>CASE 3911:</u>

Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SE/4 of Section 8, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Said acreage to be dedicated to a well located in the NW/4 SE/4 of said Section 8. In the alternative applicant seeks approval of a non-standard oil proration unit comprising the E/2 SE/4 of said Section 8 and the W/2 SW/4 of Section 9, said Township and Range, said unit to be dedicated to a well to be drilled in the NE/4 SE/4 of said Section 8.

CASE 3882:

(Continued from the October 9, 1968, Examiner Hearing) Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Teague Blinebry Pool, Lea County, New Mexico.

CASE_3883:

(Continued from the October 9, 1968, Examiner Hearing) Application of Solar Oil Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 506 of the Commission Rules and Regulations to provide for a limiting gas-oil ratio of 6,000 cubic feet of gas per barrel of oil in the Imperial Tubb-Drinkard Pool, Lea County, New Mexico.

LAW OFFICES OF JOHN F. RUSSELL 412 HINKLE BUILDING P. O. DRAWER 640 ROSWELL. NEW MEXICO 88201 October 17, 1968

TELEPHONE 622-4641 AREA CODE 505

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

Dear Mr. Porter:

I transmit herewith, in triplicate, the exhibits which were omitted from the Application of Texas Pacific Oil Company for a salt water disposal well which has been designated as Case 3905 on the Docket for Examiner Hearing on Wednesday, October 23, 1968.

Very truly yours, John F. Cassell

John F. Russell

JFR:d Enclosures

Unter 10 H. C. Ki

HALLIBURTON CUMPANY DWIEION

ToTexas Pacific Oil Company Box 1069 Hobbs, New Mexico 88240		Date October 9, 1968 Date Date Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approva of laboratory management; it may however, be used in the course of regular business operations by any person or concert and employees thereof receiving such report from Holliburtor Company.			
Submitted by			Date Rec	10-3-68	
St. "AC" \$1 Well No	Depth_	W:-Grossroads	Formation.	Devonian	
Lea County	Field	W. Crossroads	Source	Well head	
······································	·		· · · · · · · · · · · · · · · · · · ·		
Resistivity	.143 @ 75	F			• • • • • •
Specific Gravity	1 040				
рН				. •	
Calcium (Ca)	2 300				.*MPi
Magnesium (Mg)					
Chiorides (Cl)	AF 500		······		
Sulfates (SO4)	640				
Bico: Onates (HCO ₃)		· · · · · · · · · · · · · · · · · · ·			
Soluble Iron (Fe)	c		en e	4	
	· · ·				
с					
Remarks: FORE EXAMINER	NHITTER	· · · · · · · · · · · · · · · · · · ·		*Milligrams per lit	er

Frank Whitfield

Analyst: cc:

CASE NO. 3905

Respectfully submitted,

HALLIBURTON COMPANY 14 1 DIVISION CHEMIST

Ву

NOTICE This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

LAW OFFICES OF JOHN F. RUSSELL 412 HINKLE BUILDING P. O. DRAWER 340 ROSWELL, NEW MEXICO 88201

October 11, 1968

TELEPHONE 622-464

割 印 4 出土

Care 3905-

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

Dear Mr. Porter:

I transmit herewith, in triplicate, the Application of Texas Pacific Oil Company for a salt water disposal well. Mr. Nutter has been given the basic information and this case will be set for hearing on October 23rd.

It is anticipated that the exhibits will be ready by the first part of next week at which time I shall forward them to you.

Thanking you for your cooperation in this matter, I remain

Very truly yours,

John F. Russell

JFR:d Enclosures

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR AN ORDER AUTHORIZING THE DISPOSAL OF SALT WATER PRODUCED FROM THE SOUTH CROSSROADS DEVONIAN POOL INTO THE DEVONIAN FORMATION BY INJECTION INTO ITS STATE "O" No. 1 WELL LOCATED IN UNIT "J" OF SECTION 15, TOWNSHIP 10 SOUTH, RANGE 36 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO. SAID WATER TO BE INJECTED INTO OPEN HOLE FORMATION BETWEEN INTERVALS OF 12,269 FEET TO 12,541 FEET.

No. 3905

·33 Bet 14 - KII 8 00

APPLICATION

COMES NOW Texas Pacific Oil Company, a Division of Joseph E. Seagram & Sons, Inc., by its Attorney, John F. Russell, and states:

1. Applicant proposes to commence the disposal of salt water produced from the South Crossroads Devonian Pool by injection into the Devonian Formation through open hole between intervals of 12,269 feet and 12,541 feet through its State "O" No. 1 Well, located in Unit "J" of Section 15, Township 10 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

2. The water being disposed of is not suitable for domestic or agricultural purposes and the disposal of said water, as proposed, will not impair production of oil, gas or fresh water from the reservoir nor will it impair correlative rights.

3. Applicant attaches hereto as Exhibit "1" a plat showing the location of the proposes injection well and all wells within two miles of said proposed injection well and the names of the lessees.

4. Applicant attaches hereto as Exhibit "2" a diagramatic

sketch showing the manner of completing the proposed injection well.

5. Applicant attaches hereto as Exhibit "3" a graph showing the production history of the aforesaid well.

6. Applicant will present at the time of the hearing the well log of the proposed injection well.

WHEREFORE Applicant requests that the Commission set this matter down for hearing before its Examiner, publish notice as required by law and after hearing issue its order authorizing the disposal of salt water as aforesaid.

-2-

DATED:

Respectfully submitted,

TEXAS PACIFIC OIL COMPANY, A Division of Joseph E. Seagram & Sons, Inc.

ussell

John F. Russell P. O. Drawer 640 Roswell, New Mexico 88201

Applicant's Attorney

DRAFT

GMH/esr

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. 3905

10 - 5 - 8

Order No. R- 254

APPLICATION OF TEXAS PACIFIC OIL COMPANY FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 23 , 1968 , at Santa Fe, New Mexico, before Examiner Daniel 8. Nutter .

NOW, on this ______ day of $\underline{\neg O \cdot Y}$, 1968, 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: 6

(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, <u>Texas Pacific Oil Company</u>
is the owner and operator of the <u>State "O" Well No. 1</u>
located in Unit <u>J</u> of Section <u>15</u>, Township <u>10</u> South, Range
<u>36</u> Bast, ENPM, <u>South Crossroads-Devenian Pool</u>, <u>Lea</u>
County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the <u>Devonian</u> formation, with injection into the <u>open-hole</u> interval from approximately <u>12,269</u> feet to <u>12,541</u> feet.

(4) That the applicant proposes to initially injection Through 2 3/8- inche tubery mistalled in a pocher set at approximately 12,105 fat and to Continuously treat the produced water prior to injection to prevent corrosion of said 2 38 - mile

-2-CABE No. 3905

approximately 12.165 feet; That the casing-tubing annulus should be filled with an inert fluidg and that a pressure gauge should be attached to the annulus or the annulus left open-at the surface in order to determine leakage in the casing, tubing, or packer. (7)(2) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

(5)

IT IS THEREFORE ORDERED:

(1) That the applicant, <u>Texas Pacific Oil Company</u> is hereby authorized to utilize its _____ State "O" Well No. 1 located in Unit J of Section 15, Township 10 South, Range East, NMPM, South Crossroads-Devonian Pool Lea County, New Mexico, to dispose of produced salt water into the formation, injection to be accomplished through + 1278 -inch tubing installed in a packer set at approximately 12105 feet, with injection into the open-hole ____ interval from approximately 12,269 feet to 12,541 feet: Provided However, that the produced sall water shall be continuously treated prior to injestimito prevent tubing Carrosian; that coupon taste corrosion tel shall be conducted continuously on said well and the vente thereof filed quarterly with the Commission untif furthe notice from the benetery-Dévelor of the Commission ; that the caringteeling annulus shall be filled with an inlest flind and that a pressure gauge shall be attached to said annulue or the annulus left open at the surpres in acher to determine leakage in the tubing, casing, or packer.



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