

CASE NO.

5531

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,
ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 16, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Oil Development
Company of Texas for salt water
disposal, Lea County, New Mexico.

Case No.
5531

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

William F. Carr, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

Eric D. Lanphere, Esq.
JOHNSON, PAULANTIS & LANPHERE
1220 Sandia Savings Building
Albuquerque, New Mexico

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MR. NUTTER: Call Case 5531.

MR. CARR: Case 5531. Application of Oil Development Company of Texas for salt water disposal, Lea County, New Mexico.

MR. LANPHERE: I am Eric D. Lanphere, Attorney with the firm of Johnson, Paulantis & Lanphere, 1220 Sandia Savings Building, Albuquerque, appearing on behalf of the Applicant, and I have one witness to be sworn.

(Witness sworn.)

DANIEL D. OSWALD, JR.

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

DIRECT EXAMINATION

BY MR. LANPHERE:

Q Would you please state your name, your occupation, and by whom you are employed?

A My name is Dan Oswald, Jr., I am a Petroleum Engineer employed by Oil Development Company of Texas.

Q Where are you located in your employment presently?

A I'm located in Amarillo, Texas.

Q Are you familiar with the subject matter of Application in Case No. 5531?

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A Yes, sir, I am.

Q Have you ever testified before this Commission?

A No, sir, I haven't.

Q Would you please state your educational and experience qualifications for the Commission?

A I received a Bachelor of Science Degree in Petroleum Engineering from the University of Oklahoma in January of 1965. My employment includes from January of 1965, until January of 1973, with Sohio Petroleum Company in the geographic areas of Oklahoma and also South Texas. From January of 1973, until the present I have been employed with Oil Development Company as a Petroleum Engineer in production operations in the areas including Oklahoma, New Mexico, Colorado and Wyoming.

Q All right. Now, what is sought in the present Application?

A The proposed Application is to convert our No. 6 Well into a salt-water-disposal well.

Q All right. You have three exhibits to present to the Commission, is that correct?

A Yes, sir, I do.

Q All right. Would you take Exhibit No. 1, please, and explain to the Commission what that shows in support

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of the Application?

A Exhibit No. 1 indicates all the oil completions, disposal completions and the name of the operators in the West Sawyer-San Andres Field. Oil Development Company operates the Santa Fe Pacific Railroad Wells Nos. 1 through 15, which are located in Sections 27, 28, 33, and 34. It also operates the Rich No. 1 Well located in Section 34 located in the N/2 of the SW/4 and also operates the 127 in Section 27 and the 122 in Section 22.

MR. LANPHERE: Let me interrupt; I didn't ask, are the Witness' qualifications accepted?

MR. NUTTER: Yes, they are.

BY MR. LANPHERE:

Q If you would continue.

A There are presently two disposal wells already in operation in the field. One is the Coastal States No. 2 Well located in the SE corner of the NW corner of Section 33. It is noted with an arrow through the circle there on the map. The other well is the No. 2 Well up in the NE corner of Section 27 operated by Cox. This map also indicates the contours of the top of the Slaughter zone porosity. Oil Development Company uses a subsea depth of minus 1000 as a cutoff or as the oil-water

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contact. To illustrate this point, in Section 34, our well No. 15, and in Section 27 our well No. 14, presently produce at 80 to 90-percent water. Moving up north, the No. 2 Well in Section 27 originally completed by Mr. Cox, according to his testimony, produced 4 to 10 barrels of oil and 110 barrels of water a day initially. In 1974 we obtained approval to convert that well into a salt-water-disposal well. The wells located in Section 23 on this contour map is not up-to-date for those wells. This map was prepared before those wells were drilled. Our Geological Department updated the map as far as well locations but we did not receive the well log until yesterday when I left for this hearing and so therefore the contours are not up-to-date. A rough sketch was made in which the 1000 foot line turns at the corner of Section 27 and comes back down to the southeast so that all of those wells are completed above the minus 1000-foot contour, so therefore they are oil and gas producers.

Our proposal is to utilize the No. 6 Well in the NW corner of Section 33; it has a red arrow pointing to the well. The reason we chose this well is that our tank battery is located just south of the No. 4 Well, our No. 4 which is directly east of the No. 6 Well in

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Section 33, less right-of-way for lines, etc. Another reason was that the No. 6 Well had already depleted to less than 1 barrel of oil per day for production, so therefore the well was uneconomical to continue producing. The red line on the map indicates that a cross-section map that I have prepared to indicate the oil-producing intervals in the proposed disposal intervals. This is our No. 6 which is our proposed well, Coastal States No. 2 Well, which is already a salt-water-disposal well, and a No. 3 which is presently a producing well. This cross section is the next exhibit.

Q All right. Would you take the next exhibit, No. 2, and explain to the Commission what it shows in support of the Application.

A These are the well logs from the three wells I have just discussed. From left to right is our subject SFPRR Well No. 6, the middle well is the Coastal States No. 2, which is presently a salt-water-disposal well, and on the right is the No. 3 Well which they are producing. The bottom line running across is the correlation of the top of the Slaughter-pay porosity. You notice on each well is listed in operation, and this is colored in red, and our No. 6 Coastal States, there, in the original oil

operations, which correlate, prevents completion in the No. 3 Well.

In 1969 Coastal States obtained approval to convert their No. 2 Well into a salt-water-disposal well. All perforations were squeezed with cement and the well was deepened from the casing point of 5025 feet to 5125 feet for salt-water-disposal purposes. Oil Development Company has squeezed the oil perforations in our No. 6 Well and deepened the well from the casing point of 5000 feet to a depth of 5150 feet for salt-water-disposal purposes and similar completion to the Coastal States Well.

You will also notice that our casing in the subject well is set at 5000 feet, which is far below the oil water contact or is below any producing horizon in the field. The bottom perforations in our well correlate to the bottom perforations in the No. 3 Well.

Q All right. Now, if you would refer to Exhibit No. 3 and explain to the Commission the purpose of this Exhibit?

A Exhibit No. 3 is a completion sketch of the subject well. You will notice that the surface casing is 8-5/8ths, was set at 417 feet, and was cemented to surface.

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The production casing was 4-1/2 inch, was set at 5000 feet, was cemented with 250 sacks of cement. The calculated top of the cement behind the casing is 4000 feet.

When we first attempted to make this a disposal well we looked at other zones and attempted to perforate completion in the Grayburg at 3490 to 3570. We squeezed behind the casing with cement, the bottom being 4985, and we brought cement up to 3092. This was verified by temperature logs. We were unable to make a satisfactory disposal well completion in this zone as the formation exhibited a very high salt content and would not accept injection in a satisfactory way below a pressure of 2200 pounds at the surface. However, it would exhibit a very slow bleed-off in pressure. A combination of the long perforated interval and the salt content prevented a complete shut off of the perfs by cement squeezes. We then came down and squeezed the San Andres perfs 4930 to 58 and 4963 to 76, and then deepened the hole from the casing point at 5000 feet to 5150. The open hole interval was then treated with acid and then plastic-coated tubing was run in the well and set at 4904. A Galveston Packer was set at 4894.

Due to the inability to completely squeeze off

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the Grayburg perms we then cemented the tubing inside the casing from the packer to the surface. We then installed a 40-horsepower Bethlehem pump at the location to dispose of the water. The pump is equipped to pump at a rate of 800 barrels per day. We have 17 completions in the field for which the total production is approximately 220 barrels of oil per day and 475 barrels of water per day. Our proposed disposal flood will be our produced water from the wells that we operate which will be approximately 475 barrels a day.

This completion was completed last Wednesday; we turned the pump on to check the injection capacity, and we disposed of approximately 400 barrels of water out of the tank at a constant injection pressure of 1800 pounds.

Q Is the packer below the top of the cement behind the casing?

A Yes, sir. The packer is at 4894, and the cement behind the casing is up to approximately 4000 feet.

A All right. Would you, with this proposed disposal well, have a precedent in the area?

A Yes, sir. The Coastal States No. 2 Well has been disposing of water since 1969 in a very similar manner,

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or a similar interval.

Q How are you disposing of your water presently?

A Presently we have been trucking the water off the lease of which the cost is approximately \$.45 a barrel.

MR. LANPHERE: I believe that would complete our direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Oswald, how many wells does Oil Development Company operate in this area?

A Seventeen wells. In the West Sawyer Field?

Q Yes. Or that will be serviced by this well.

A Seventeen producing wells; eighteen counting this one.

Q And you're making 475 barrels of water a day?

A Yes, sir.

Q You say you did take a test on this well and you were able to get 475 barrels a day into the San Andres formation?

A Yes, sir. We pumped approximately 400 barrels. The pump is designed to pump at a rate of 800 barrels per day. This is because your tanks work on an on-off type

operation, so it was actually pumping at a rate of 800 barrels a day but we pumped away 400 barrels and the pump shut down on a low-level switch off the tank.

Q And what pressure was it?

A Eighteen-hundred pounds surface pressure.

Q That's surface pressure?

A Yes, sir.

Q I have a note here that if this Application is approved it supersedes salt-water-disposal Order No. 168. Is that the administrative order that approved disposal into the Grayburg, do you know?

A I would assume it was; the Grayburg does not produce oil and we obtained administrative approval for that.

Q You did have a permit?

A Yes.

Q That must be the one then.

A It was administrative, but like I say it took 2200 pounds to pump into it at 3000 feet and that's just too high.

Q You're not doing much better at 1800 pounds.

A Well, it's true; we thought we could do better.

Q What kind of disposal pressures do they have

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there in the Coastal States Well?

A It is approximately the same. This is the main reason we are completing this well. Originally we were utilizing their well; they had excess capacity and were taking our water. However, approximately 3 to 4 months ago the pressure got up above the rating of their pump and they had a lot of trouble, and so they installed smaller plungers so they wouldn't have pump problems, which decreased their capacity of the pump, which in turn knocked us out.

Q Gave more pressure but less volume, so you were aware of the volume that was decreased?

A Yes. They continued to dispose their water, which of course the agreement calls for, and they did not have enough capacity for us, at which time we had to start trucking our water and we made the application to convert this well for disposal purposes.

MR. NUTTER: Are there any further questions of Mr. Oswald? He may be excused. Do you have anything further, Mr. Lanphere?

MR. LANPHERE: I would just like to move the introduction of these three exhibits.

MR. NUTTER: Oil Development Company's Exhibits

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Nos. 1 through 3 will be admitted into evidence.

(Whereupon, Oil Development
Company's Exhibits No. 1 through
3 were admitted into evidence.)

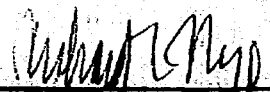
MR. NUTTER: Does anyone else have anything
they wish to offer in Case 5531? We will take the
case under advisement and the hearing is adjourned.

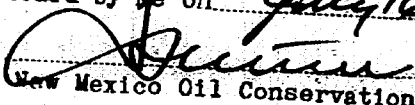
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STATE OF NEW MEXICO)
COUNTY OF SANTA FE)

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. 5531 heard by me on July 16, 1975.
, Examiner
New Mexico Oil Conservation Commission

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A circular diagram showing the distribution of 1000 respondents by age group. The circle is divided into segments representing different age ranges: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85+. The segments are labeled with their respective percentages of the total respondents.

P. O. BOX 2088 - SANTA FE


87501

Re: CASE NO. 5531
ORDER NO. R-5073

Applicant:

Dear Sir:

Yours very truly,

Yours very truly,

JOE D. RAMEY
Secretary-Director

Copy of order also sent to:

Other _____

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. 5531
Order No. R-5073

APPLICATION OF OIL DEVELOPMENT
COMPANY OF TEXAS 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 July 16, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 22nd day of July, 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, Oil Development Company of Texas, is the owner and operator of the SPPRR Well No. 6, located in Unit D of Section 33, Township 9 South, Range 37 East, NMPM, West Sawyer-San Andres Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres formation, with injection into the open-hole interval from approximately 5,000 feet to 5,150 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic lined tubing set at approximately 4904 feet with the casing-tubing annulus cemented from the surface of the ground down to a packer located at approximately 4894 feet.

(5) That the operator should notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(6) 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.

-2-

Case No. 5531
Order No. R-5073

(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, Oil Development Company of Texas, is hereby authorized to utilize its SFPRR Well No. 6, located in Unit D of Section 33, Township 9 South, Range 37 East, NMPM, West Sawyer San Andres Pool, Lea County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing set at approximately 4904 feet, with injection into the open-hole interval from approximately 5,000 feet to 5,150 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be cemented from the surface of the ground down to a packer set at approximately 4894 feet.

(2) That the operator shall notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(3) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing, casing, or cement, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

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

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



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Phil R. Lucero
PHIL R. LUCERO, Member

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

S E A L

jr/

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5531

Order No. R- 5073

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

ORDER OF THE COMMISSION

BY THE COMMISSION:

July 16,

This cause came on for hearing at 9 a.m. on ~~January 8~~, 1975,
at Santa Fe, New Mexico, before Examiner, Daniel S. Nutter.

NOW, on this day of July, 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, Oil Development Company of Texas,
is the owner and operator of the SFPRR Well No. 6,
located in Unit D of Section 33, Township 9 South,
Range 37 East, NMPM, West Sawyer-San Andres Pool,
Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres
formation, with injection into the open-hole interval
from approximately 5,000 feet to 5,150 feet.

(4) That the injection should be accomplished through
2 3/8-inch plastic lined tubing ~~installed in a packer~~
~~set~~ with the
~~at approximately 4904 feet, that the casing-tubing annulus~~
~~cemented from the surface of the ground, to a~~
~~should be filled with an inert fluid, and that a pressure gauge~~
~~packer located at approximately 4894 feet.~~
~~or approved leak detection device should be attached to the~~

~~annulus in order to determine leakage in the casing, tubing,
or packer.~~

~~(4) That the injection well or system should be equipped
with a pop-off valve or acceptable substitute which will
limit the wellhead pressure on the injection well to no more
than 700 psi.~~

(5) That the operator should notify the supervisor of
the Hobbs district office of the Commission of the date
and time of the installation of disposal equipment so that the
same may be inspected.

(6) 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.

(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, Oil Development Company of Texas,
is hereby authorized to utilize its SFPRR Well No. 6,
located in Unit D of Section 33, Township 9 South,
Range 37 East, NMPM, West Sawyer-San Andres Pool,
Lea County, New Mexico, to dispose of produced salt
water into the San Andres formation, injec-
tion to be accomplished through 2 3/8-inch
tubing ~~installed in a packer~~ set at approximately 4904 feet,
with injection into the open-hole interval from approximately
5,000 feet to 5,150 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined;
that the casing-tubing annulus shall be ~~filled with an inert~~ cemented from the
surface of the ground down to a packer
set at approximately 4894 feet. ~~fluid; and that a pressure gauge shall be attached to the annulus~~
~~or the annulus shall be equipped with an approved leak detection~~
~~device in order to determine leakage in the casing, tubing, or~~
~~packer.~~

~~(2) That the injection well or system shall be equipped with a pop-off valve or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 700 psi.~~

(2) That the operator shall notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(3) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing, casing, or ^{Cement} ~~packer~~, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

(5) 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.

COMPLETION SKETCH
Oil Development Company of Texas SFPRR No. 6 Well
Salt Water Disposal
Lea County, New Mexico

8-5/8" casing @ 417', cemented to surface

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
OIL DEV. CO. EXHIBIT NO. 3
CASE NO. 5531

Top of cement behind casing @ 3092'

Grayburg perfs, 3490-3570'

Bottom of cement behind casing @ 4985'

Calculated top of cement behind casing @ 4000'

2-3/8" EUE Tubing @ 4904', plastic coated internally, cemented to surface

Guiberson Packer @ 4894'

San Andres Oil perfs, 4930-58' & 4963-76'
Squeezed w/ 200 sx Class A. Held 1500 psi for 25 min. test.

4-1/2" casing @ 5000', cemented with 250 sx

Open hole completion 5000-5150'

treated w/ acid

*tubing
cont'd in
casing
top to bottom
ODC wells
make
475 bbls
per day
17 prod
wells:
1800 per
surf.*

*Grayburg did
not take
sufficient
wt - no gas
for disposal
but could not
get good results
job on
SB perfs*

EXHIBIT 3

- CASE 5526: Application of Austral Oil Company for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Blanco-Mesaverde and Basin-Dakota production in the wellbore of its Bunny Well No. 1, located in Unit P of Section 10, Township 27 North, Range 9 West, San Juan County, New Mexico.
- CASE 5527: Application of Plains Radio Broadcasting Company for an exception to the provisions of Order No. R-3221, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose into earthen pits produced salt water from its L. E. Ranch 9 Wells Nos. 1, 2, and 3, located, respectively, in Units O, N, and I of Section 9, and its L. E. Ranch 16 Wells Nos. 2 and 3, located, respectively, in Units B and A of Section 16, all in Township 11 South, Range 28 East, East Chisum-San Andres Pool, Chaves County, New Mexico.
- CASE 5528: Application of Reserve Oil and Gas Company for waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its South Langlie-Jal Langlie Mattix Waterflood Project in the Langlie Mattix pool by the conversion to water injection of its Unit Wells Nos. 24 and 26 located, respectively, in Unit O of Section 18 and Unit M of Section 17, both in Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 5529: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the creation of a new gas pool for Morrow production, said to be designated Sheep Draw-Morrow Gas Pool to comprise the E/2 of Section 11 and the W/2 of Section 12, Township 23 South, Range 25 East, Eddy County, New Mexico.
- CASE 5530: Application of Cities Service Oil Company for the amendment of Order No. R-5052, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5052, which order pooled all mineral interests in the Wolfcamp formation underlying the SE/4 of Section 30, Township 21 South, Range 27 East, and in the Pennsylvanian formation underlying the E/2 of said Section 30, to be dedicated to a well drilled at an orthodox location for both formations. Applicant proposes the amendment of said order to provide for an unorthodox location for said well at a point 1980 feet from the South line and 2190 feet from the East line of said Section 30.
- CASE 5531: Application of Oil Development Company of Texas for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the open-hole interval from 5,000 to 5,150 feet in its SFPRR Well No. 6, located in Unit D of Section 33, Township 9 South, Range 37 East, West Sawyer-San Andres Pool, Lea County, New Mexico.

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Oil Development Company of Texas		ADDRESS P. O. Box 12058, Amarillo, Tx 79101	
LEASE NAME SFPRR	WELL NO. 6	FIELD West Sawyer (San Andres)	COUNTY Lea
LOCATION <div style="display: flex; justify-content: space-between;"> UNIT LETTER D WELL IS LOCATED 519 FEET FROM THE North LINE AND 801 FEET FROM THE West LINE, SECTION 33 TOWNSHIP 9S RANGE 37E NMPM. </div>			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	8-5/8"	417'	325	Surface	circulated
INTERMEDIATE					
LONG STRING	4-1/2"	5000'	250	4000'	Calculation
TUBING	2-3/8"	4985'	NAME, MODEL AND DEPTH OF TUBING PACKER Guiberson tension At 4985'		

NAME OF PROPOSED INJECTION FORMATION San Andres		TOP OF FORMATION 4152'	BOTTOM OF FORMATION approx. 5700'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? open hole	PROPOSED INTERVAL(S) OF INJECTION 5000-5150'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? oil completion in San Andres zone		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? yes
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH San Andres oil perfs 4930-58' & 4963-76'. Will use 150 sx. Grayburg 3490-3570', will use 250sx			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 300'	DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 500	MINIMUM 500	MAXIMUM 1000	OPEN OR CLOSED TYPE SYSTEM closed
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE yes		IS INJECTION TO BE BY GRAVITY OR PRESSURE? pressure	APPROX. PRESSURE (PSIG) 1500
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Michael Harton, Box 24, Tatum, New Mexico		LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Coastal States Gas Producing Company, 600 Wilco Building, Midland, Tx 79701 Sun Oil Company, 901 W. Wall, Midland, Tx 79701	
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? No		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL No	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) yes		ELECTRICAL LOG yes	
		DIAGRAMMATIC SKETCH OF WELL yes	

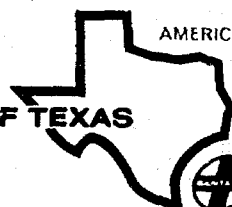
[Signature]
(Signature)

Petroleum Engineer
(Title)

May 29, 1975
(Date)

NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

OIL DEVELOPMENT COMPANY OF TEXAS



AMERICAN NATIONAL BANK BUILDING P.O. BOX 12058,
AMARILLO, TEXAS 79101 • PHONE 806/376-5741

A SANTA FE INDUSTRIES COMPANY

May 29, 1975

NM-16-7

New Mexico Oil Conservation Commission
P.O. Box 1980
Hobbs, New Mexico 88240

RE: Application for Salt Water Disposal
SFPRR No. 6 Well
Lea County, New Mexico

Net for log 7/16
if approved, supersede
SWD-168

Gentlemen:

Enclosed are five copies of C-108, Application to Dispose of Salt Water by Injection into a Porous Formation, along with a diagrammatic sketch for the purpose of converting our SFPRR No. 6 well into a salt water disposal well in the San Andres formation. The area plat and log were submitted with the original application on May 7, 1975.

The proposed interval for disposal purposes is the San Andres, Permian Age, between the depths of 5000' and 5150'. This is the interval in which Coastal States is utilizing for salt water disposal purposes in their SFPRR No. 2 well also located in Section 33. The Grayburg and San Andres oil perforations will be squeezed with cement before the well is deepened. The source of the injected water will be the salt water produced from the West Sawyer (San Andres) Field completions.

It is proposed that this application be scheduled in the hearings to be held in July.

Also enclosed for approval are five copies of Form C-101, Application for Permit to Deepen, in regard to the subject well. The Form C-102 was submitted with the original application on May 7, 1975. Verbal approval, subject to the findings of the hearing, is requested so that field operations can commence.

Please advise if additional information is required.

Very truly yours,

D. D. Oswald, Jr.
Petroleum Engineer

DDO:dm
Attach.

DOCKET MAILED

Date 7/2/75