

Case Number

3912

Application
Transcripts.

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 7, 1968

EXAMINER HEARING

IN THE MATTER OF:)

Application of American)
Petrofina Company of Texas)
for salt water disposal,)
Roosevelt County, New)
Mexico.)

Case No. 3912

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3912

MR. HATCH: Case 3912, application of American Petrofina Company of Texas for salt water disposal, Roosevelt County, New Mexico.

MR. CAMPBELL: Mr. Examiner, I'm Jack M. Campbell with Stephenson, Campbell and Olmsted, Santa Fe, New Mexico, representing the applicant.

MR. UTZ: Are there any other appearances? You may proceed.

MR. CAMPBELL: We have one witness, Mr. Chapman, to be sworn.

(Witness sworn.)

J. C. CHAPMAN

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

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Will you state your name, please, your occupation and by whom you are employed and in what capacity?

A J. C. Chapman. I'm from Big Springs, Texas. I'm employed by American Petrofina Company of Texas as a Petroleum Engineer.

Q Have you previously testified before this Commission and its Examiners in your professional capacity as a Petroleum

Engineer?

A Yes, I have. It's been some time ago.

MR. CAMPBELL: Are the witness's qualifications acceptable?

MR. UTZ: Yes, he's qualified.

Q (By Mr. Campbell) I presume, Mr. Chapman, in your capacity as an employee of American Petrofina, you are acquainted with the application of that company in this case?

A Yes, I am.

Q Have you notified all of the parties within the distance prescribed by the Commission for notification?

A Yes, we have.

Q Have you notified the United States Geological Survey?

A Yes.

Q Have you received any response from any of the parties that you notified surrounding this area?

A No, we have not.

Q Have you received any reaction from the United States Geological Survey?

A They informed me that they would hold up the approval on it, pending the decision of the Oil Conservation Commission.

Q They voiced no objection to you?

A No objection.

MR. CAMPBELL: Will you mark that Exhibit One,
please?

(Whereupon, applicant's Exhibit
Number One was marked for
identification.)

Q (By Mr. Campbell) I hand you what's been identi-
fied as Exhibit Number One and ask you to state what that is?

A This is a plat of the area surrounding our Federal
"C" lease in the Prairie-Cisco field of Roosevelt County. The
lease is located in Sections 20 and 21 of Township 8 South,
Range 36 East.

Q And have you marked the location of your properties?

A We have marked the location of the Federal "C"
lease in Sections 20 and 21 and the proposed disposal well in
the southwest quarter of the northwest quarter of Section 21.

Q Is that the well, the one that's identified with
a green check mark?

A It is, yes.

Q Are there any other salt water disposal wells in
that area, to your knowledge?

A Yes. The Lone Star Producing Company has a disposal
well in Section 29, the northeast quarter of the northeast
quarter, their Federal "D" Number 1.

Q Into which zone is this well, or is water being
injected?

A Injected into the San Andres formation.

Q What is the source of the salt water you intend to inject into this well?

A The salt water is being produced from the Bough "C" formation in wells in that field, the Prairie-Cisco field.

Q And where, generally, are those wells located, please?

A They are located in every direction around the proposed disposal well within a mile or two radius.

Q Your wells?

A Yes. Mostly our wells. There will probably be water from another operator as well as Petroleum Corporation of Texas.

Q What is the volume of water you expect to inject immediately if this application is permitted and you rework this well, Mr. Chapman?

A Approximately six hundred fifty barrels per day.

Q And what is the ultimate amount that you anticipate will be injected?

A Approximately eleven hundred maximum.

Q Did you attach to your application a water analysis of the water that you expect to inject?

A Yes, I did.

(Whereupon, Applicant's Exhibit Number Two was marked for identification.)

Q (By Mr. Campbell) I have handed you what has been identified as Applicant's Exhibit Number Two which appears to be a diagrammatic sketch of the proposed salt water well. Using that diagrammatic sketch, will you explain to the Examiner what it is you intend to do to prepare this well for salt water injection?

A All right. This well is producing from the Bough "C" formation, perforations from 9647 to 9670. It's on four and half inch casing set through that pay. It's our intention to plug those perforations with cement on the bottom with twenty sacks of cement, put another twenty sacks of plug at seventy-seven hundred foot as suggested by the U.S.G.S., nad then to cut off what four and a half casing we can, which is, generally, in that area about five thousand feet. We will pull the four and a half casing from the well at five thousand feet. Then, using two inch tubing on a tension packer set in the bottom of the intermediate string of eight and five-eighths casing which is cemented to the surface, we will inject salt water down to two inch tubing, lined tubing, into the San Andres formation.

Since the top of the cement around the bottom of the four and a half casing is a 8690, other formations will also be open to water injection, including the Glorieta, the Tubb and the Abo formations. Those three are not productive in

that area of oil or gas.

Q Do you consider that by using this method, you will adequately protect any possible fresh water in this area?

A Yes. The eight and five casing is cemented to the surface, to the ground, with cement and we put the packer on tubing. There should be no danger whatsoever of any fresh water zone being contaminated.

Q Is it your opinion that this method of reworking this to make a salt water disposal well will prevent waste and that correlative rights of owners in the area will be protected?

A Yes, this is my opinion.

MR. CAMPBELL: Another exhibit, please.

(Whereupon, Applicant's Exhibit Number Three was marked for identification.)

Q (By Mr. Campbell) I hand you what's been identified as Applicant's Exhibit Number Three and ask you to state what that is, please.

A This is a laterolog run on the well. It was drilled in 1961 by Cosden Petroleum Corporation, It includes all the formations down through the Pennsylvanian and Bough "C" formation.

Q Are the matters contained on your diagrammatic sketch, Exhibit Number Two, consistent with what the well log shows relative to the location of the various zones?

A The tops and formations as shown on the Exhibit Number Two are obtained from the electric log.

Q There's one other question I neglected to ask you; are you the sole owner of this property?

A American Petrofina owns fifty per cent and are operators of the lease, and the other fifty per cent is owned by Mobil Oil Company, and I believe the Commission has a letter from them indicating their approval of this installation proposed.

MR. CAMPBELL: That's all the questions I have at this time, Mr. Examiner. I'd like to offer the Applicant's Exhibits One, Two and Three in evidence, please.

MR. UTZ: Without objection, Exhibits One, Two and Three will be entered into the record at this time.

(Whereupon, Applicant's Exhibits One, Two and Three were admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Chapman, am I correct that the cement on your four and a half is 8690, and the eight and five-eighths is cemented from 4211 to where?

A To the surface.

Q Circulated?

A Yes, that's correct.

Q Now, I believe you stated that this interval, there would be the Glorieta and some other formations.

A Yes, the Tubb and Abo.

Q But there are no fresh waters or any oil producing zones?

A That's correct. Of course, the San Andres is producing oil in that area.

Q Is it this same section that's producing oil?

A Yes. The nearest production is about half a mile.

Q What affect do you think this water injection will have on that oil production?

A In my opinion, it shouldn't have any affect on it for a long time to come.

Q You think it might actually act as a water flood?

A I think it would be a water flood to a certain extent, yes.

Q Now, in you annulus, what do you intend to put in, inert fluid in the annulus or the packer?

A Yes, we do, by closing the annulus and putting a pressure gauge on it to check pressure.

Q And your two inch tubing will be cement lined?

A Right.

MR. UTZ: Are there other questions?

MR. NUTTER: Yes.

CROSS EXAMINATION

BY MR. NUTTER:

Q How was the top of the cement on the four and a half determined, by temperature survey?

A Temperature survey, yes.

Q So you will have from approximately eighty-seven hundred feet down to about ninety-six hundred feet or nine hundred feet of cement between the injection zone and the Bough "C" productive zone in the field?

A That is correct.

Q This is a Bough "C" producer at the present time?

A At the present time, yes.

Q And has it been depleted or watered out? Which one?

A Yes. It's making six barrels of oil a day and not economic to continue to do so.

Q What is the anticipated rate of injection? Oh, I've got it here.

MR. NUTTER: I believe that's all. Thank you.

MR. UTZ: Other questions? The witness may be excused. The case will be taken under advisement. The hearing is adjourned until 1:30, at least.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
J. C. CHAPMAN	
Direct Examination by Mr. Campbell	2
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<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1	4	8
Applicant's 2	5	8
Applicant's 3	7	8

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, Charlotte J. Macias, Court Reporter in and for the
County of Bernalillo, State of New Mexico 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.

Charlotte Macias
Court Reporter

I do hereby certify that the foregoing is
a true and correct record of the proceedings in
the hearing of Case No. 3912
heard on 11-3-1968.
Thomas A. [Signature] Examiner
New Mexico Oil Conservation Commission

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

P. O. BOX 2088
SANTA FE

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

November 18, 1968

Honorable Jack M. Campbell
Stephenson, Campbell & Olmsted
Attorneys at Law
Post Office Box 877
Santa Fe, New Mexico

Re: Case No. 3912
Order No. R-3557
Applicant:
American Petrofina Company

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC X

Aztec OCC

Other Mr. Harold Berends, Bureau of Land Management, Santa Fe
Mr. D. E. Gray, State Engineer Office, Santa Fe, N. M.

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. 3912
Order No. R-3557

APPLICATION OF AMERICAN PETROFINA
COMPANY OF TEXAS FOR SALT WATER
DISPOSAL, ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 7, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 18th day of November, 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, American Petrofina Company of Texas, is the owner and operator of the Federal "C" Well No. 2, located in Unit E of Section 21, Township 8 South, Range 36 East, NMPM, South Prairie-Cisco Pool, Roosevelt County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres, Glorieta, Tubb, and Abo formations, with injection into the open-hole interval from approximately 4211 feet to 8690 feet.

(4) That the injection should be accomplished through 2 3/8-inch cement-lined tubing installed in a packer set at approximately 4200 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

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CASE No. 3912
Order No. R-3557

be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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, American Petrofina Company of Texas, is hereby authorized to utilize its Federal "C" Well No. 2, located in Unit E of Section 21, Township 8 South, Range 36 East, NMPM, South Prairie-Cisco Pool, Roosevelt County, New Mexico, to dispose of produced salt water into the San Andres, Glorieta, Tubb, and Abo formations, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4200 feet, with injection into the open-hole interval from approximately 4211 feet to 8690 feet;

PROVIDED HOWEVER, that the tubing shall be cement-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface 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.

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



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID E. CARGO, Chairman

GUYTON B. HAYS, Member

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

esr/

Case 3912

Heard 11-7-68

Rec. 11-7-68

1. Grant Am. Petrofina of 24.
permission to connect their
Ded. 'C' # E-21-85-36 E. to So.
Prairie Sisco pool to a SA D injection
well by plugging back to 7700'
and injecting ~~through~~ ^{2"}
cement lined tubing, under a packer
into the open hole zone ^(4280' to 5680') of the
San Andres Glorieta Sub-Atm.
formations.

The annulus 8 7/8 x 2" tubing filled
with inert fluid with pressure
gauge at the surface.

Thos A. [Signature]

Mobil Oil Corporation

MAIN OFFICE
OCT 30 AM 8 41

P.O. BOX 633
MIDLAND, TEXAS 79701

October 28, 1968

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

*Stitt
case file*

CASE 3912 - APPLICATION OF AMERICAN
PETROFINA COMPANY OF TEXAS FOR
SALT WATER DISPOSAL - ROOSEVELT
COUNTY, NEW MEXICO

Gentlemen:

It is recommended that the application of American Petrofina Company of Texas for approval of salt water disposal in Case 3912 be approved.

Yours very truly,

Ira B. Stitt

Ira B. Stitt
Division Operations Engineer

JLSanders:mw

cc:
American Petrofina Company of Texas
Post Office Box 1311
Big Spring, Texas 79720

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. 3912
Order No. R-3557

APPLICATION OF AMERICAN PETROFINA
COMPANY OF TEXAS FOR SALT WATER
DISPOSAL, ROOSEVELT COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

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NOW, on this 18th day of November, 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, American Petrofina Company of Texas, is the owner and operator of the Federal "C" Well No. 2, located in Unit E of Section 21, Township 8 South, Range 36 East, NMPM, South Prairie-Cisco Pool, Roosevelt County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres, Glorieta, Tubb, and Abo formations, with injection into the open-hole interval from approximately 4211 feet to 8690 feet.

(4) That the injection should be accomplished through 2 3/8-inch cement-lined tubing installed in a packer set at approximately 4200 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

-2-
CASE No. 3912
Order No. R-3557

be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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, American Petrofina Company of Texas, is hereby authorized to utilize its Federal "C" Well No. 2, located in Unit E of Section 21, Township 8 South, Range 36 East, NMPM, South Prairie-Cisco Pool, Roosevelt County, New Mexico, to dispose of produced salt water into the San Andres, Glorieta, Tubb, and Abo formations, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4200 feet, with injection into the open-hole interval from approximately 4211 feet to 8690 feet;

PROVIDED HOWEVER, that the tubing shall be cement-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface 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.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

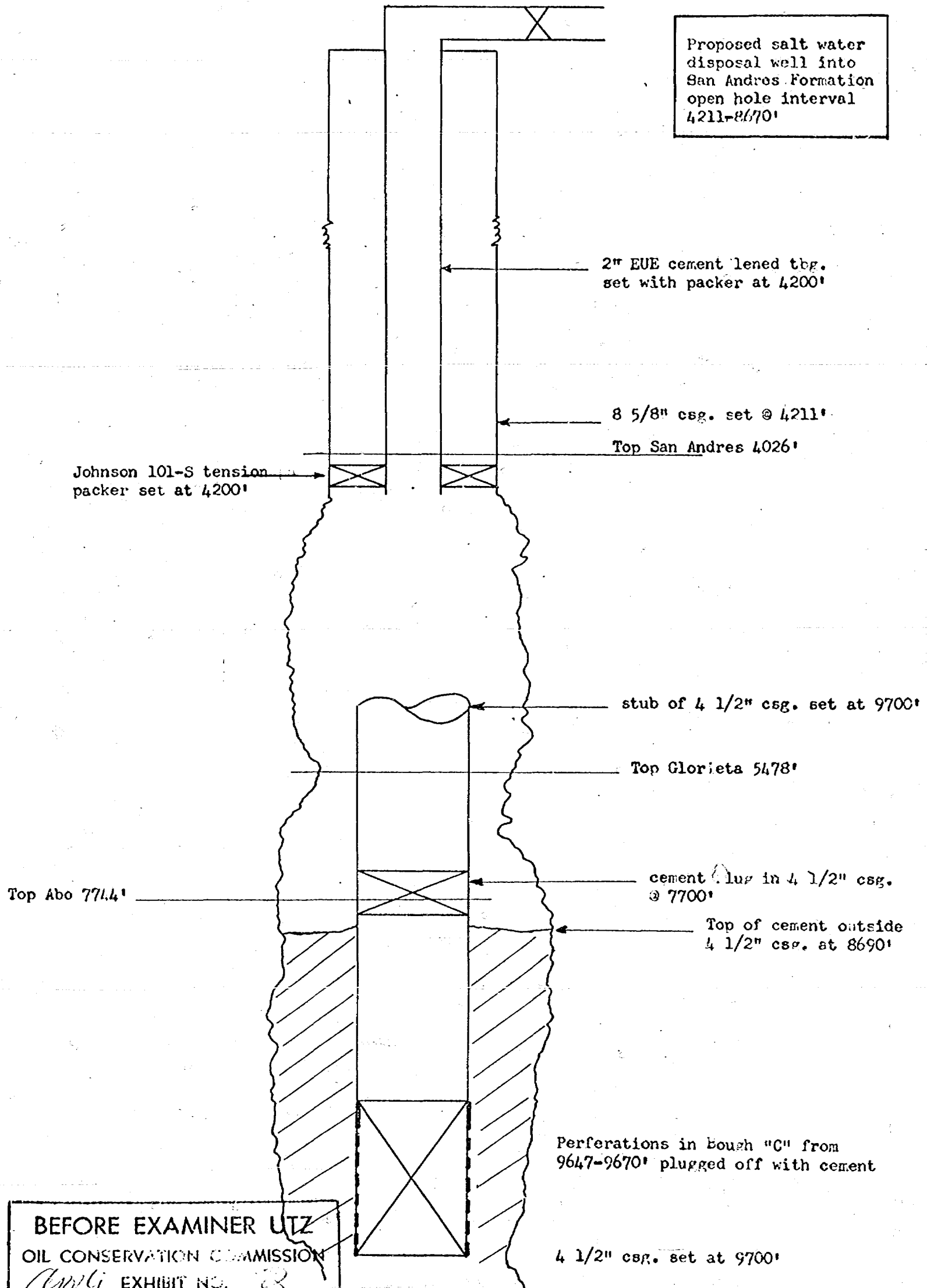
A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

AMERICAN PETROFINA CO. OF TEXAS
FEDERAL "C" well no. 2

PRAIRIE CISCO SOUTH FIELD
Roosevelt County, New Mexico



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 38
CASE NO. 3912

406 W. ILLINOIS PHONE 883-4521
MIDLAND, TEXAS 79701

RESULT OF WATER ANALYSES

TO: Mr. Cliff Chapman
P. O. Box 1311, Big Spring

ANALYSES

LABORATORY NO. 96827

SAMPLE RECEIVED 9-6-68

RESULTS REPORTED 9-10-68

P. O. Box 1311, Big Lake, Texas

COMPANY American Petrofina Co. of Texas LEASE As Leased

FIELD OR POOL 1. Prairie 2. South Prairie

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Roosevelt STATE N M.

SOURCE OF SAMPLE AND DATE TAKEN:
(San Andres) - taken from O'Neil treater drain line to pit.

NO. 1 Produced water (San Andres) - taken from O'Neil treater drain line to pit. 9- 4-68
Produced water (Penn.) - taken from Fed. "C" treater drain line to pit. 9- 4-68

NO. 1 Promised
NO. 2 Produced water (Pannu.) - taken from Fed. & State
NO. 3 _____

NO. 3 _____

NC. 4 _____

REMARKS:

REMARKS: _____				
CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.1689	1.0798		
pH When Sampled	6.9	6.9		
pH When Received	307	246		
Bicarbonate as HCO ₃	84	2		
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	77,000 ✓	19,900		
Calcium as Ca	22,000	6,292		
Magnesium as Mg	5,346	1,013		
Sodium and/or Potassium	77,758	50,152		
Sulfate as SO ₄	487	576		
Chloride as Cl	173,997 ✓	90,904 ✓		
Iron as Fe	28.7	19.3		
Barium as Ba	0	0		
Turbidity, Electric	37.6	26.8		
Color as Pt	20	2		
Total Solids, Calculated	279,924 ✓	149,202 ✓		
Temperature °F.				
Carbon Dioxide, Calculated	63	51		
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 60° F.	0.050	0.077		
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks				
Letter of recommendation attached.				

Form No. 3

By Waylan C. Martin, M. A.



AMERICAN PETROFINA COMPANY OF TEXAS

POST OFFICE BOX 1311 • BIG SPRING, TEXAS 79720

October 7, 1968

Case 3912

68 OCT 10 AM 8 22

New Mexico Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Gentlemen:

American Petrofina Company of Texas
Federal "C" Lease, Prairie Cisco
South Field, Roosevelt County

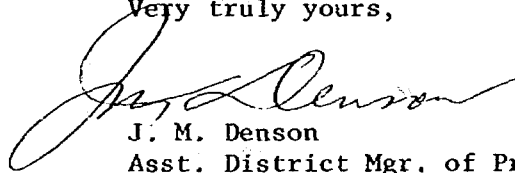
Attached is Form C-108 in which we are making application to dispose of salt water into the San Andres formation in our Federal "C" Well No. 2, currently producing in the Prairie Cisco South Field of Roosevelt County.

This will involve cementing off the Bough "C" perforations from 9,647 to 9,670 from which the well is now producing, cutting off and pulling the 4 1/2" casing from approximately 5,000 ft, setting a packer on 2" EUE cement lined tubing in the bottom of the intermediate string of 8 5/8" casing and injecting down the 2" EUE tubing into the open hole (San Andres formation) below the 8 5/8" casing.

Attached are copies of the electrical log on the well, a plat of the area, and a diagrammatic sketch of the well equipped as proposed.

Your early consideration of this matter would be appreciated.

Very truly yours,


J. M. Denson
Asst. District Mgr. of Production

JCC/js

Attachment

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

Core
3912

OPERATOR AMERICAN PETROFINA COMPANY OF TEXAS		ADDRESS Box 1311, Big Spring, Texas 79720	
LEASE NAME Federal "C"	WELL NO. 2	FIELD Prairie Cisco, South	COUNTY Roosevelt
LOCATION UNIT LETTER E ; WELL IS LOCATED 1980 FEET FROM THE North LINE AND 660 FEET FROM THE East LINE, SECTION 21 TOWNSHIP 8-S RANGE 36-E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	13-3/8	452	450
INTERMEDIATE	8-5/8	4211	1700
LONG STRING	4-1/2	9700	200
TUBING	2" EUE	4200	NAME, MODEL AND DEPTH OF TUBING PACKER Johnson 101-S 4200'
NAME OF PROPOSED INJECTION FORMATION San Andres		TOP OF FORMATION 4026	BOTTOM OF FORMATION 5478
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Open Hole	PROPOSED INTERVAL(S) OF INJECTION 4211 - 8690
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil producer in Bough "C"		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes Bough "C"
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 9647 - 9670 20 SX			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 400		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 9647
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 500	MINIMUM 500	MAXIMUM 800	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 -		WATER TO BE DISPOSED OF Yes	NATURAL WATER IN DISPOSAL ZONE Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) State owns surface - lease is part of State Game & Fish Commission Wild Life Refuge		APPROX. PRESSURE (PSI) 2,000	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL			
Cities Service Oil Co., Box 69, Hobbs, New Mexico 88240			
J. M. Huber Corp., Vaughn Bldg., Midland, Texas 79701			
Lone Star Producing Co., Box 4615, Midland, Texas 79701			
Joseph I. O'Neill, Jr., 410 W. Ohio, Midland, Texas 79701			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?			
SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

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

J. M. Denson **J. M. Denson Asst. District Mgr. of Production** **October 7, 1968**
(Signature) (Title) (Date)

NOTE: Should waivers from the State Engineer, 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.

Case 3912

COPIES, AS FOLLOWS:

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501 (3)

New Mexico State Engineering
State Capitol Building
Santa Fe, New Mexico 87501

New Mexico Game & Fish Commission
State Capitol
Santa Fe, New Mexico 87501

Cities Service Oil Co.
Box 69
Hobbs, New Mexico 88240

Joseph I. O'Neill, Jr.
410 W. Ohio
Midland, Texas 79701

Lone Star Producing Co.
Box 4815
Midland, Texas 79701

J. M. Huber Corporation
Vaughn Building
Midland, Texas 79701

Stephenson, Campbell & Olmsted
P. O. Box 877
Santa Fe, New Mexico 87501
Attention: Mr. Jack M. Campbell

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. 3912

Order No. R-3557

APPLICATION OF AMERICAN PETROFINA
COMPANY OF TEXAS FOR SALT WATER
DISPOSAL, ROOSEVELT COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 7, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of November, 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, American Petrofina Company of Texas,
is the owner and operator of the Federal "C" Well No. 2,
located in Unit E of Section 21, Township 8 South, Range
36 East, NMPM, South Prairie-Cisco Pool, Roosevelt
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres, Glorieta, and Abo
formations, with injection into the open-hole interval
from approximately 4211 feet to 8690 feet.

(4) That the injection should be accomplished through
2 7/8-inch plastic-lined tubing installed in a packer set at

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approximately 4200 feet; that the casing-tubing annulus should be filled with an inert fluid; 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.

(5) 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, American Petrofina Company of Texas, is hereby authorized to utilize its Federal "C" Well No. 2 located in Unit E of Section 21, Township 8 South, Range 36 East, NMFM, South Prairie-Cisco Pool, Roosevelt County, New Mexico, to dispose of produced salt water into the San Andres, Glorieta, Tubb, and Abo formations, injection to be accomplished through 2 3/4-inch tubing installed in a packer set at approximately 4200 feet, with injection into the open-hole interval from approximately 4211 feet to 8690 feet; PROVIDED HOWEVER, that the tubing shall be ^{cement} ~~plastic~~-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus ~~or the annulus left open~~ at the surface 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.

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