

**CASE 4395: Appli. of CONSOLIDATED
OIL & GAS, INC. FOR SALT WATER
DISPOSAL, LEA COUNTY, NEW MEXICO.**

Case Number

4395

Application
Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 5, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Consolidated Oil &
Gas Inc. for salt water disposal,
Lea County, New Mexico.

Case 4395

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE

MR. UTZ: Case 4395.

MR. HATCH: Case 4395, Application of Consolidated Oil & Gas, Inc. for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin of Kellahin & Fox, Santa Fe, appearing for the Applicant. I have one witness to be sworn.

(Exhibit 1 marked
for identification.)

R. L. FLOWERS

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A R. L. Flowers, Jr.

Q And by whom are you employed and in what position, Mr. Flowers?

A Consolidated Oil and Gas as a petroleum engineer.

Q Have you ever testified before the Oil Conservation Commission before one of its Examiners and made your qualifications as an engineer a matter of record?

A Yes, sir.

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

MR. UTZ: Yes, sir.

Q (By Mr. Kellahin) Are you familiar with the application of Consolidated Oil and Gas Inc. in Case 4395?

A Yes, I am.

Q Briefly, what is proposed by the Applicant in this case?

A We are proposing to convert Ship Number 117 into salt water disposal, the producing formation which is the Abo. This well is located 660 feet from the east line and 1,980 feet from the north line, Section 17, Township 17 South, Range 37 East.

MR. KELLAHIN: Would you please mark these?

(Whereupon, Exhibit 1
was marked for identification.)

Q Now referring to what has been marked as Applicant's Exhibit Number 1, which is a multiple page exhibit, would you refer to the second exhibit in that folder and discuss the information?

A This is a map showing two-mile radius plat of surrounding this well, Ship 117. In brown we have two San Andres completions and one circle there in brown is shown as temporarily abandoned. That is a recently drilled hole. That is not commercially productive and has been temporarily abandoned and in the other are shown the Abo completions.

Q Now the orange well which is circled in black, is that the disposal well?

A Yes, it is.

Q You are going to dispose of water in what formation, the Abo?

A The Abo Formation.

Q Now that is the same horizon that the orange colored wells are producing from?

A Yes, it is

Q Who is the operator of the San Andres well immediately to the south of the disposal well?

A Consolidated Oil and Gas.

Q And is there any other production in the area from San Andres?

A Texaco has a well approximately a mile and a half away. It is shown as Texaco D.G.

Q That is in Section 18 to the west?

A Yes, it is.

Q Is there any other production in this area that could possibly be affected by the use of this well for salt water disposal?

A Not as far as the San Andres is concerned.

Q That is what I meant. Turning to what is marked Exhibit Number 1, would you identify Exhibit 1, Page 2?

A This is a well sketch as we propose to complete the well starting at the top 10 3/4 inch surface casing set

at a depth 343 feet and cement was circulated at 7 5/8 inch. Intermediate casing strain was set at 3,550 feet and calculated top of cement on that strain is 1,790 feet. A liner is in the well. It is a 5 1/2 inch liner. The top of it is 3,424 and the bottom of 9,030. This liner was cemented initially with 330 sacks at the bottom and then the top of the liner was tested. It leaked. It was squeezed with fifty sacks and the liner was then drilled out and the entire casing strain was tested to 1,500 PSI for thirty minutes and held.

Q Now the exhibit shows that the San Andres perforations are open in this liner, is that correct?

A Yes, sir, they are still open. The zone was tested recently and it is not productive of oil even though it is offset by production.

Q And is it watered out in that area?

A It is all watered at that particular location.

Q Do you propose to complete this well with a 2 7/8 plastic-coated tubing?

A Yes we do, packer set at approximate depth of 8,500.

Q And so you will be injecting coated tubing through a packer?

A Yes.

Q Would you fill the tubing casing annulus with an inner fluid?

A We will attempt to fill it with fluid. I can not state it will be filled. We don't know if San Andres will take it or not. It may or may not.

Q In your opinion and based on your experience, would you expect the fluid will stabilize?

A Yes.

Q And will that give you any indication as to whether any leakage in the tubing?

A I would expect some casing to build up some gas pressure, at least on the casing to build up and remain static.

Q Would that enable you to use a guage at the surface, then, to determine if you have a tubing leak?

A Yes, sir.

Q Referring to the next page of the exhibit, would you discuss the information on there?

A Briefly, this is shown that the formation to be injected into is the midway Abo injection interval is 8,915 to 8,926 1/2. They were plain shots and not an entire interval. The T. D. of the well was 9,038. That is from well "X" logs. Plug back T. D. is 8,930. The flood we intend to inject is from the San Andres and the Abo Formations. It is unfit for domestic stock irrigation or other general use. The analysis of the water from both zones is attached and the estimated injection volume initially is 300 barrels per day and a maximum

of 600 barrels per day. I would like to state that I really expect this fluid to be more like 200 barrels a day and remain relatively static.

Q Do you anticipate there will be an injection pressure initially?

A None is expected.

Q Would you expect it later on in the history of the well as an injection well?

A If I can speak briefly, I do not expect any pressure on this well for quite some time.

Q And would you anticipate the pressure would be high in the event they do build up?

A No, sir, I do not.

Q Now the water analysis attached, does it show water to be corrosive?

A The water is expected to be corrosive due to this water analysis that is shown in this analysis.

Q For that reason you will be using plastic tubing and closed system?

A Yes, sir.

Q Have you contacted the offset operators in connection with this proposed disposal well?

A I contacted the immediate offset operators of this Gulf Oil and also Southern Union Production Company although we are operating their production at this time. I received

waivers from each and I have included them.

Q That would substantially cover all the production within the immediate area of this injection well, would it not?

A I did not contact the Atlantic Richfield Production or Texico. They are quite some way away.

Q Now, as I understand, you are going to be injecting in the Abo Formation which is a producing formation?

A Yes, it is.

Q In your opinion, would the injection of water in this formation have any adverse effect or shorten the producing life of any of the wells in the area?

A Not in my opinion. There are currently fifteen producing Abo formations in the Midway Abo Pool and the current production average is twenty-three barrels per day per well. This is based on April, 1970 numbers which are the latest I had available. Of course, the water that we intend to inject is coming from the Ship "A" lease and the Ship 217 which is the San Andres completion.

Q In your opinion, it would cause no damage to the producing formation, is that correct?

A No, sir.

Q To inject into it?

A That field is essentially a depleted oil field at this point.

Q Now the Exhibit Number 1 also contains a well log. Have you marked any information on that log?

A I have marked the producing interval, I mean the interval to be injected into. Shown on the various scales is one-inch and one-hundred feet. I have shown the curves at 8,915, 8,919 and 8,926.

Q Do you have anything else to add, Mr. Flowers?

A I would like to add from time to time water could be injected from the Midway State Lease although this would be an extremely small amount of water.

Q Would the fact that the San Andres Formation is open and the liner have any adverse effect on the use of this well for injection purposes, in your opinion?

A Would you repeat that?

Q Would the fact that that San Andres perforations are open in the well bore have any adverse effect on the use of the well for injection?

A No, sir.

Q Cause any damage, in your opinion?

A Not in my opinion.

Q Was Exhibit 1 and the various pages contained therein prepared by you or under your supervision?

A They were.

Q At this time I would like to offer in evidence the

Applicant's Exhibit Number 1.

MR. UTZ: Without objection Exhibit 1 and attachments will be entered into the record of this case.

MR. KELLAHIN: That completes our presentation, Mr. Utz.

MR. UTZ: Could you say how much water you intend to inject here?

A I think I stated initially we plan to inject 300 barrels per day, but I really expected it to be less than that.

MR. UTZ: Do you expect it to increase substantially?

A No, sir, I do not.

MR. UTZ: Be under pressure or gravity?

A It will gravity.

MR. UTZ: Other questions of the witness? You may be excused. Statements?

The case will be taken under advisement.

I N D E XWITNESSPAGE

R. L. FLOWERS

Direct Examination by Mr. Kellahin

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E X H I B I T SEXHIBITMARKEDOFFERED &
ADMITTED

Applicant's 1

2

10

STATE OF NEW MEXICO)
)) ss
 COUNTY OF BERNALILLO)

I, SOVEIDA GONZALES, 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 that the same is a true and correct
 record of the said proceedings, to the best of my knowledge,
 skill and ability.

Soveida Gonzales
 COURT REPORTER

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 4395,
 heard by me on *March 8*, 19*70*.

Michael J. [Signature], Examiner
 New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

GOVERNOR
DAVID P. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

August 12, 1970

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 4395
Order No. R-4010
Applicant:
Consolidated Oil & Gas, Inc.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X

Artesia OCC

Aztec OCC

Other State Engineer Office

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. 4395
Order No. R-4010

APPLICATION OF CONSOLIDATED OIL & GAS, INC.,
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 August 5, 1970,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 12th day of August, 1970, 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, Consolidated Oil & Gas, Inc., is
the owner and operator of the Shipp Well No. 1-17, located in
Unit H of Section 17, Township 17 South, Range 37 East, NMPM,
Midway-Abo Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Abo formation, with
injection into the perforated interval from approximately 8915
feet to 8926 feet.

(4) That the injection should be accomplished through
2 7/8-inch plastic-lined tubing installed in a packer set at
approximately 8463 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. 4395
Order No. R-4010

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, Consolidated Oil & Gas, Inc., is hereby authorized to utilize its Shipp Well No. 1-17, located in Unit H of Section 17, Township 17 South, Range 37 East, NMPM, Midway-Abo Pool, Lea County, New Mexico, to dispose of produced salt water into the Abo formation, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 8463 feet, with injection into the perforated interval from approximately 8915 feet to 8926 feet;

PROVIDED HOWEVER, that the tubing shall be 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 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

ALEX J. ARMISTO, Member

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

Case 4395

Heard 7-5-70

Rec. 8-7-70

Grant Consolidated permission
to connect their Shipp #1-17-H-
17-17-37, Midway - Afo to SWD
colls. Direction shall be thru
2 7/8 Int. Plastic coated tubing.
under a packer + into perf
in the Afo at 8915-26. Annulus
shall be filled w inert fld.
insofar as possible due to
San Andreas perp. in the
annulus.

Thos D. [Signature]

Docket No. 18-70

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 5, 1970

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 4385: (Continued from the July 15, 1970 Examiner Hearing)

Application of King Resources Company for a unit agreement, Otero County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Brokeoff Mountain Unit Area comprising 37,747 acres, more or less, of Federal, State and Fee lands in Townships 24, 25, and 26 South, Ranges 19 and 20 East, Otero County, New Mexico.

CASE 4388: Application of Humble Oil & Refining Company for an exception to Order No. R-3221, as amended, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicant's Florence B. Lusk, DeSmet Federal, and Hesse Federal leases located in Sections 6 and 7 of Township 15 South, Range 30 East, Double L Queen Pool, Chaves County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits located in the vicinity of said wells.

CASE 4389: Application of Coastal States Gas Producing 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 Upper Pennsylvanian formation through the perforated interval from 9789 to 9924 feet in its State "27" Well No. 2 located in Unit P of Section 27, Township 14 South, Range 32 East, Tulk-Pennsylvanian Pool, Lea County, New Mexico.

CASE 4390: Application of Murphy H. Baxter for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North E-K Queen Unit Area comprising 978 acres, more or less, of State lands in Township 17 South, Range 33 East, and Township 18 South, Ranges 33 and 34 East, E-K Yates-Seven Rivers-Queen Pool, Lea County, New Mexico.

Examiner Hearing - August 5, 1970

Docket No. 18-70

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- CASE 4391: Application of Murphy H. Baxter for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its North E-K Queen Unit Area by the injection of water into the Queen formation through 4 wells located in Units A, D, F, and G of Section 7, Township 18 South, Range 34 East, E-K Yates-Seven Rivers-Queen Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.
- CASE 4392: Application of Southwestern Natural Gas, Inc. for the assignment of back allowable, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the assignment of back allowable to its Mershon Gas Comm Well No. 1 located in Unit A of Section 21, Township 22 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico, for the period from the date of completion of said well on September 22, 1969, to the date of connection of said well on June 4, 1970.
- CASE 4393: Application of Mobil Oil Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from 12,240 feet to 12,463 feet in its Santa Fe Pacific Well No. 3 located in Unit M of Section 26, Township 9 South, Range 36 East, Crossroads-Devonian Pool, Lea County, New Mexico.
- CASE 4394: Application of Phillips Petroleum Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Plata Deep Unit Area comprising 5,600 acres, more or less, of Federal and State lands in Sections 8, 9, 10, 11, 14, 15, 16, 22 and 23 of Township 20 South, Range 32 East, Lea County, New Mexico.
- CASE 4395: Application of Consolidated Oil & Gas, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from 8915 to 8926 feet in its Shipp Well No. 1-17 located in Unit H of Section 17, Township 17 South, Range 37 East, Midway Abo Pool, Lea County, New Mexico.

Examiner Hearing - August 5, 1970

Docket No. 18-70

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CASE 4396: Application of Klabzuba, Munson and Seaman for a dual completion and salt water disposal, Chaves County, New Mexico. Applicants, in the above-styled cause, seek authority to dually complete its (Varel) Avalanche Journal Well No. 1 located in Unit N of Section 18, Township 10 South, Range 28 East, Chaves County, New Mexico, in such a manner as to produce gas from the San Andres formation in the perforated interval from 2186 to 2204 feet of the Race Track (San Andres) Pool through the casing-tubing annulus and dispose of produced salt water through tubing into the San Andres formation of said pool in the perforated interval from 2262 to 2289 feet.

CASE 4397: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Rio Trust and all other interested persons to appear and show cause why the following Rio Trust wildcat wells located in Section 2, Township 1 North, Range 2 East, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program:

Little Chama Valley Co. Well No. 1
located 660 feet from the North line
and 1380 feet from the West line;

Sargent Well No. 1 located 925 feet
from the West line and 1445 feet from
the South line.

CASE 4267: (Reopened)

In the matter of Case No. 4267 being reopened by the Oil Conservation Commission on its own motion to permit Edward M. Kriss and all other interested parties to appear and show cause why the Edward M. Kriss Little Chama Valley Company Well No. 1, a wildcat well, located 545 feet from the North line and 1530 feet from the West line of Section 2, Township 1 North, Range 2 East, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4398: Application of Michael P. Grace and Corinne Grace for compulsory pooling and unorthodox gas well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2

Examiner Hearing - August 5, 1970
Docket No. 18-70

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(Case 4398 continued)

and the S/2 of Section 2, Township 23 South, Range 26 East, Eddy County, New Mexico, to form two 320-acre proration units for the production of gas from any or all zones of the Pennsylvanian formation. Said N/2 and S/2 to be dedicated to wells to be drilled respectively, at unorthodox locations 2500 feet from the North line and 330 feet from the East line of said Section 2 and 990 feet from the South line and 660 feet from the East line of said Section 2.

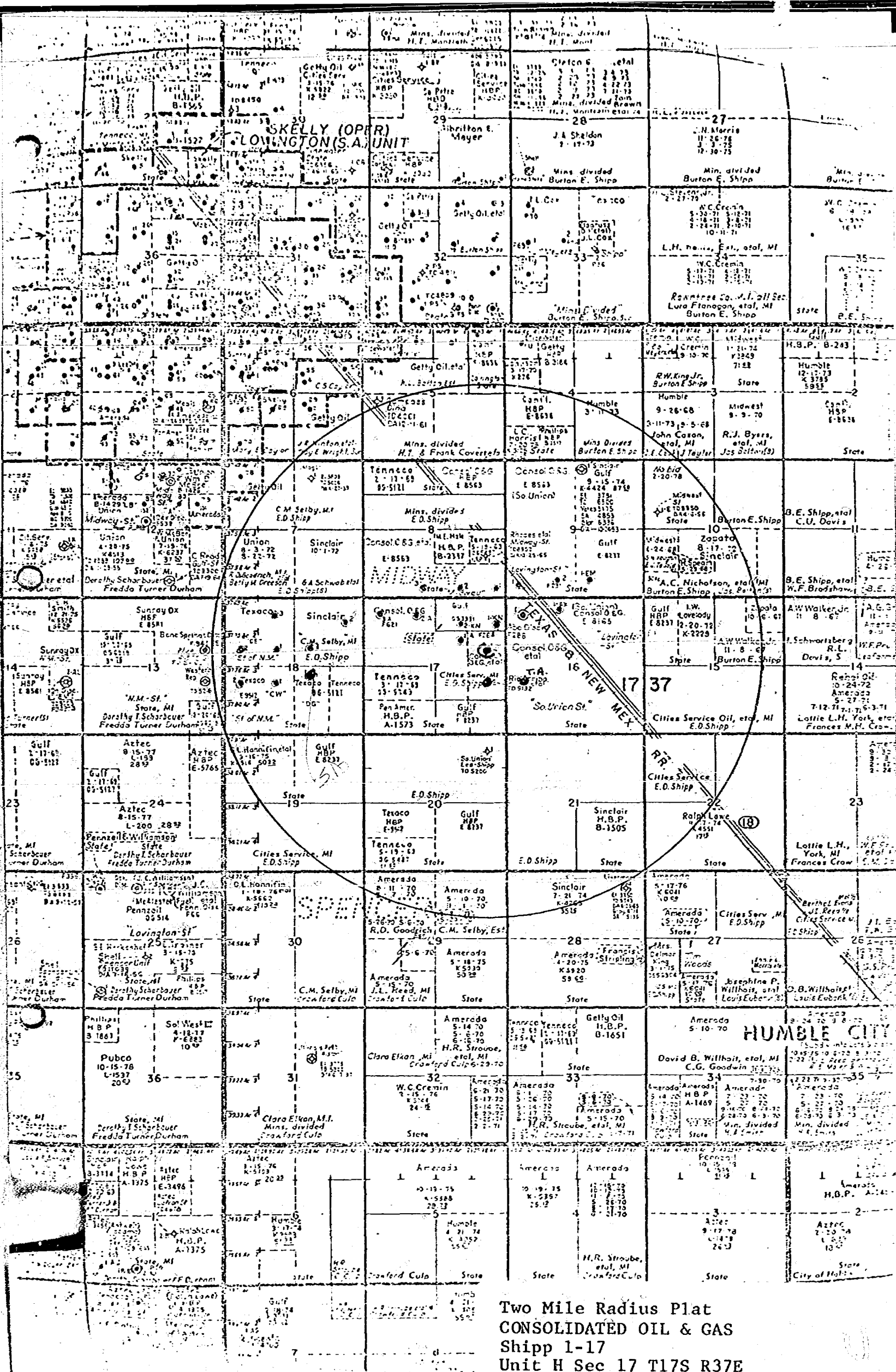
Also to be considered will be the costs of drilling said wells, a charge for the risk involved, provisions for the allocation of actual operating costs, and the establishment of charges for supervision of said wells.

CASE 4354: (Continued from the July 1, 1970, Examiner Hearing)

Application of Michael P. Grace and Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 11, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, said acreage to be dedicated to a well to be drilled in either the NE/4 NW/4 or the NW/4 NE/4 of said Section 11. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

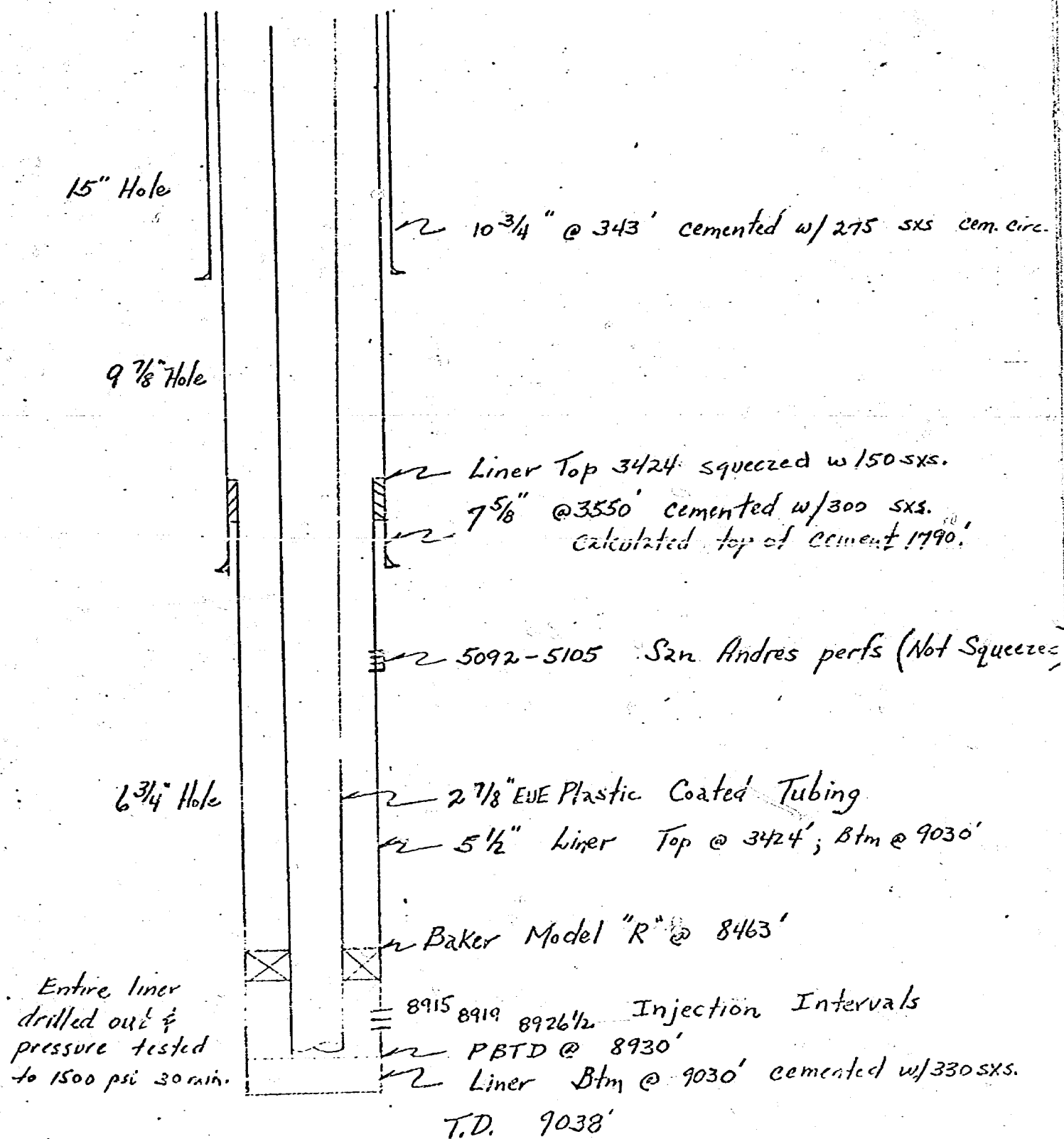
CASE 4395
Application of:
CONSOLIDATED OIL & GAS, INC.
For Salt Water Disposal
Shipp Well No. 1-17
Lea County, New Mexico

BEFORE EXAMINER UTZ
CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 4395



- San Andres
- Abo

Well Sketch
 Shipp 1-17
 660 FEL $\frac{1}{2}$ 1980 FNL
 Sec 17, T17S, R37E.
 Lea County, N.M.



Pertinent Information
Shipp #1-17
SE NE Sec. 17 T17S R37E
Lea County, New Mexico

Formation:

Midway Abo

Injection Interval:

8915-8926.5'

T. D.:

9038' ✓

PBTD:

8930'

Type of Injection Fluid:

Salt water from San Andres
and Abo formations. Unfit
for domestic, stock,
irrigation, or other general
use.

Analysis of Water:

Attached

Estimated Injection Volumes:

Initial 300 BPD
Maximum 600 BPD

Expected Injection Pressure Initially: Gravity

WFO
HLS

WATER ANALYSIS
for

DATE: 6-19-70

Smi-Bro Chemical Company, P.O. Box 123, Wichita Falls, Texas

SOURCE: Consolidated Oil & Gas, Well # 2, Shipp lease

Alkalinity	880 ppm
Hardness	18,000 "
Chloride	32,000 "
Sulfate	120 "
Iron	35 "
Hydrogen sulfide	50 "
Barium	0
Carbon dioxide	80m "
pH value	6.3

J. H. Payne, Analyst

well file
#3

WATER ANALYSIS
for

DATE: 4-2-70

Smi-Bro Chemical Company, Box 123, Wichita Falls, Texas

SOURCE: Consolidated Oil & Gas, Shipp A well # 3

Alkalinity	90	ppm
Hardness	105,000	"
Chloride	242,000	"
Sulfate	168	"
Iron	25	"
Barium	0	"
Hydrogen sulfide	0	"
Carbon dioxide	220	"
pH value	5.8	

J. H. Payne, Analyst



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.

Shipp 1-17
wcu file

June 24, 1970

Gulf Oil Company
Producing Office
Box 670
Hobbs, New Mexico 88240

Attention: J. D. Mussett

Gentlemen:

This letter is a request for waiver from Gulf Oil Company as an offset operator for Consolidated Oil & Gas, Inc. to inject salt water in the Shipp No. 1-17 located 660' from east line and 1980' from north line, Section 17, T17S, R37E, Lea County, New Mexico.

The interval of injection will be into the Abo formation from 8915' to 8926½'.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

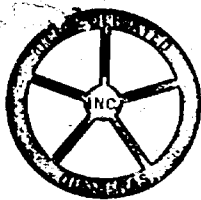
Lee Flowers

Lee Flowers

OBJECTION WAIVER

By

J. H. Smith 6-27-70
For Area Production Manager
GULF OIL CORPORATION



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.

June 24, 1970

*Mick
pk keep 1 copy for our file*

Southern Union Production Company
1434 Fidelity Union Tower Building
Dallas, Texas 75201

Attention: Mr. Tom Morgan, Sr.

Gentlemen:

This letter is a request for waiver from Southern Union Production Company as an offset operator for Consolidated Oil & Gas, Inc. to inject salt water in the Shipp No. 1-17 located 660' from east line and 1980' from north line, Section 17, T17S, R37E, Lea County, New Mexico.

The interval of injection will be into the Abo formation from 8915' to 8926½'.

Yours very truly,

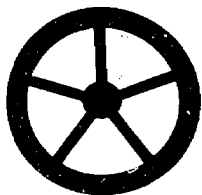
CONSOLIDATED OIL & GAS, INC.

E. J. Henderson
E. J. Henderson
Manager of Operations

OBJECTION WAIVER

By *[Signature]*

For Southern Union Production Company



Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

June 24, 1970

Gulf Oil Company
Producing Office
Box 670
Hobbs, New Mexico 88240

Attention: J. D. Mussett

Gentlemen:

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The interval of injection will be into the Abo formation from 8915' to 8926½'.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Lee Flowers

Lee Flowers

OBJECTION WAIVER

By

J. H. Sanders 6-27-70
For Area Production Manager
GULF OIL CORPORATION

Case 4395



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.

70 JUL 24 AM 8 37

June 24, 1970

Case # 4395

Southern Union Production Company
1434 Fidelity Union Tower Building
Dallas, Texas 75201

Attention: Mr. Tom Morgan, Sr.

Gentlemen:

This letter is a request for waiver from Southern Union Production Company as an offset operator for Consolidated Oil & Gas, Inc. to inject salt water in the Shipp No. 1-17 located 660' from east line and 1980' from north line, Section 17, T17S, R37E, Lea County, New Mexico.

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Yours very truly,

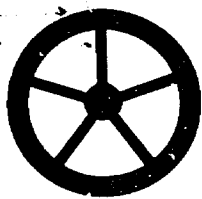
CONSOLIDATED OIL & GAS, INC.

E. J. Henderson

E. J. Henderson
Manager of Operations

OBJECTION WAIVER

By *Almy C. Smith* SM
For Southern Union Production Company



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.

RECEIVED

AM 8 17

JUL 1 1970

Case 4395

July 1, 1970

Set for hearing

Effect by producing
well #2

J. D. Ramey, Supervisor
District I
New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico 88240

Dear Mr. Ramey:

We submit for your administrative approval, applications to inject salt water into the Consolidated Oil & Gas Shipp #1-17 located 660' FEL & 1980' FNL, Section 17, T17S, R37E, Lea County, New Mexico.

The subject well will replace salt water disposal well Shipp #2-17 located 1980' FSL & 660' FEL, Section 17, T17S, R37E. The Shipp #2-17 has been recompleted as a San Andres producer thereby necessitating a new salt water disposal well.

Attached please find a two-mile Radius Plat, Gamma Ray-Acoustic Log, Well Sketch, and Form C-108. Copies have been sent to the surface owner and those offset operators shown on C-108.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

R. L. Flowers Jr.

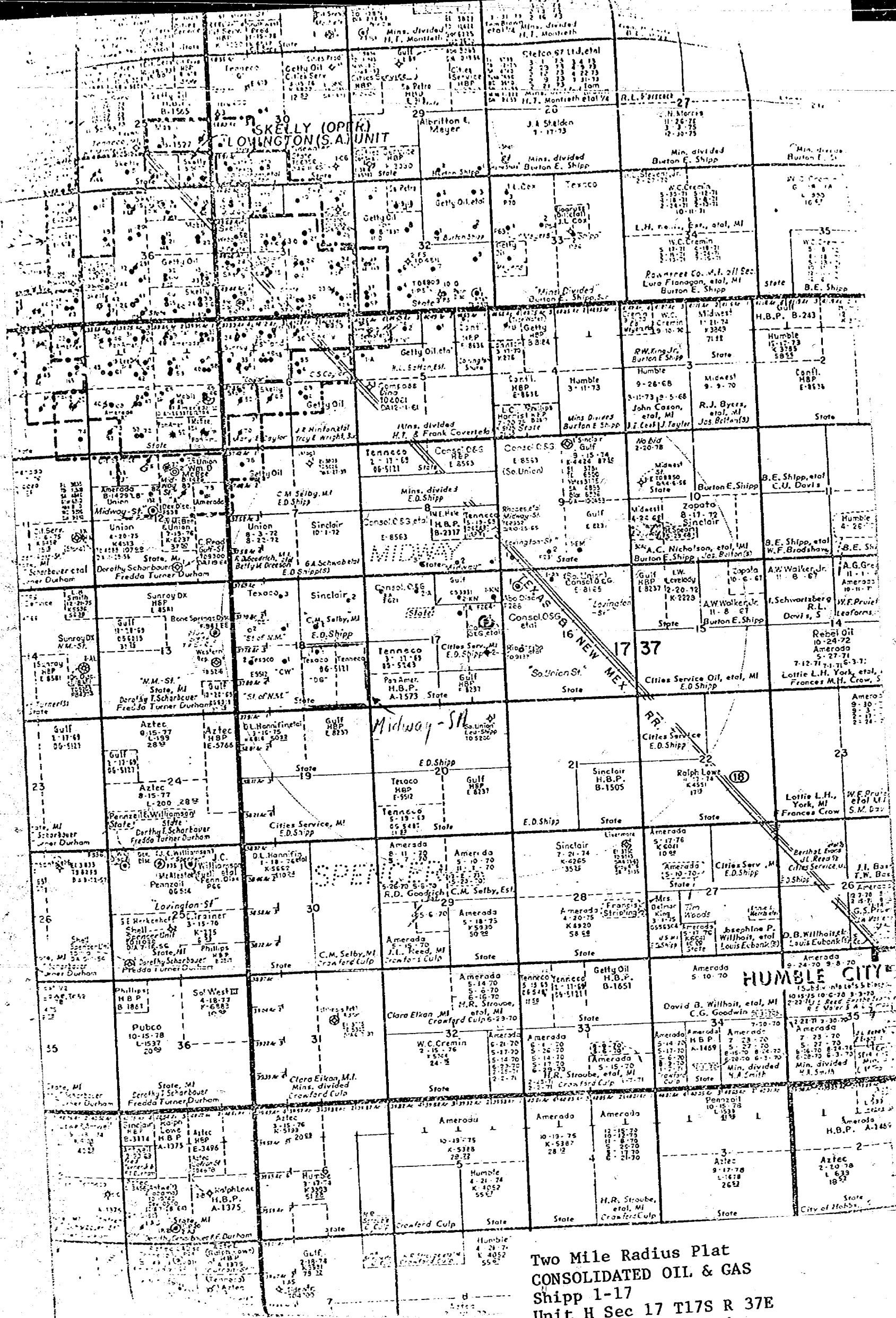
R. L. Flowers, Jr.
Petroleum Engineer

DOCKET MAILED

Date 7/23/70

RLF/ds

c.c.: E.D. Shipp, Gulf Oil Company, Southern Union Production Co.
Attach.



Two Mile Radius Plat
CONSOLIDATED OIL & GAS
Shipp 1-17
Unit H Sec 17 T17S R 37E
Lea County, New Mexico

Well Sketch
 Shipp 1-17
 660 FEL & 1980 FNL
 Sec 17, T17S, R37E
 Lea County, N.M.

Chas 4395

15" Hole

10 3/4" @ 343' cemented w/ 275 sxs cem. circ.

9 7/8" Hole

Liner Top 3424
 7 5/8" @ 3550' cemented w/ 300 sxs.

5092-5105 San Andres perfs (Not Squeezed)

6 3/4" Hole

2 7/8" EVE Plastic Coated Tubing
 5 1/2" Liner Top @ 3424'; Btm @ 9030'

Baker Model "R" @ 8463'

8915 8919 8926 1/2 Injection Intervals

PBTD @ 8930'

Liner Btm @ 9030'

T.D. 9038'

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JUL 8 1970

OIL CONSERVATION COMM.
HOBBS, N. M.

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

OPERATOR CONSOLIDATED OIL & GAS, INC.		ADDRESS 1860 Lincoln, Suite 1300 Denver, Colo.	
LEASE NAME Shipp	WELL NO. 1-17	FIELD Midway Abo	COUNTY Lea
LOCATION UNIT LETTER H ; WELL IS LOCATED 660 FEET FROM THE East LINE AND 1980 FEET FROM THE North LINE, SECTION 17 TOWNSHIP 17S RANGE 37E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	10 3/4	343	275
INTERMEDIATE	7 5/8	3550	300
LONG STRING Liner	5 1/2	Top: 3424 Btm: 9030	330
TUBING Plastic Coated	2 7/8	8463 Est.	Baker Model "R"
NAME OF PROPOSED INJECTION FORMATION Abo		TOP OF FORMATION 8850	BOTTOM OF FORMATION 9038 T.D.
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES Perforations	PROPOSED INTERVAL(S) OF INJECTION 8915, 8919, 8926 1/2
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil		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 5092-5105 Not Cemented			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA Est 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 5111	
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) 200		MINIMUM 300	MAXIMUM 300
OPEN OR CLOSED TYPE SYSTEM Closed		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	
APPROX. PRESSURE (PSI) Vacuum		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	
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) E. D. Shipp Box 281 Lovington, New Mexico		WATER TO BE DISPOSED OF Abo & San Andres	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL		NATURAL WATER IN DISPOSAL ZONE Yes	
Southern Union Production Co. 1434 Fidelity Union Tower Building		Yes	
Dallas Texas 75201		No	
Gulf Oil Co. Box 670 Hobbs, New Mexico 88240			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		THE NEW MEXICO STATE ENGINEER	
Yes		Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		ELECTRICAL LOG	
Yes		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.

E. L. Flower
(Signature)

Petroleum Engineer
(Title)

6/29/70
(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.

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**OIL CONSERVATION COMM.
HOBBS, N. M.**

approximately 8463 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, Consolidated Oil & Gas, Inc., is hereby authorized to utilize its Shipp Well No. 1-17, located in Unit H of Section 17, Township 17 South, Range 37 East, NMPM, Midway-Abo Pool, Lea County, New Mexico, to dispose of produced salt water into the Abo formation, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 8463 feet, with injection into the perforated interval from approximately 8915 feet to 8926 feet;

PROVIDED HOWEVER, that the tubing shall be 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.

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. 4395

Order No. R- 4010

APPLICATION OF CONSOLIDATED OIL & GAS, INC.,
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 August 5, 1970,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this day of August, 1970, 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, Consolidated Oil & Gas, Inc.,
is the owner and operator of the Shipp Well No. 1-17,
located in Unit H of Section 17, Township 17 South, Range
37 East, NMPM, Midway-Abo Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Abo
formation, with injection into the perforated interval
from approximately 8915 feet to 8926 feet.

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