CASE 3979: Appli. of CONSOLIDATED OIL & GAS, INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

ase Number 1

Application Transcripts.

Small Exhibits

T. T.

BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

December 2, 1968

EXAMINER HEARING

IN THE MATTER OF:

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

Case No. 3979

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



MR. NUTTER: Case No. 3979.

MR. HATCH: Application of Consolidated Oil and Gas, Incorporated, for salt water disposal, Lea County, New Mexico.

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

MR. KELLAHIN: Jason Kellahin, appearing on behalf of the applicant. I have one witness that I would like to have sworn.

(Witness sworn.)

WAYNE RODGERS

called as a witness on behalf of the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A Wayne Rodgers.
- Q By whom are you employed?
- A Consolidated Oil and Gas, Incorporated.
- Ω Are you an engineer?
- A Yes.
- Q Have you testified before the Oil Conservation

 Commission of New Mexico, and made your qualifications as a

 matter of record?

A Yes, sir, I have.

MR. KELLARIN: Are the witness' qualifications acceptable, Mr. Examiner?

MR. NUTTER: They are.

- O Are you familiar with the application of Consolidated Oil and Gas, Incorporated, in Case 3979?
 - A Yes, sir.
- Q What is proposed by Consolidated Oil and Gas, Incorporated, in this application?
- A We propose to re-enter and make a salt water disposal well in the Midway Abo Field.
- Referring to a multiple-page exhibit which has been marked as Exhibit Number 1, I bring your attention to the plat contained as the first sheet in that exhibit. Would you identify that, please?
- A Yes. This exhibit is a plat showing the geographical area within a two-mile radius of the proposed salt water disposal well, Shipp No. 2. It shows all of the wells within the area. It shows the cost to operate the wells, and the names of the wells.
- Q It shows, also, the proposed salt water disposal well, does it not?

A It does.

- Q Are all of the wells shown on that plat producing from the Midway Abo Field?
 - A To the best of my knowledge, they are.
- Q They are producing from the same formation in which you propose to inject salt water, is that correct?
 - A That's correct.
- Q Now, referring to what appears as the second page of Exhibit 1, would you identify that exhibit?
- A This is a diagrammatic sketch of the Shipp No. 2 Well. Shipp No. 2 is located in the northeast quarter, southeast quarter, Section 17, Township 17 South, Range 37 East, Lea County, New Mexico. The exhibit shows the down-hole position of the well as it stands now. It also shows that we propose to deepen the well from 9,122 feet KB, down to approximately 9,200 feet.
- Q Now, for the purposes of water disposal, what interval will be utilized in this well?
- A We propose to deepen the well in the Abo to the depth I mentioned a moment ago, and to dispose of the produced water from this field in the open hole section of the Abo. If the well at any time does not have the capacity to take the water, then we propose to reperforate the Abo.
- Q Now, the disposal interval, would that fall below the producing interval in this pool?

- A Yes, sir, it would. In fact, this well, upon original completion attempt, was below the water.
 - Q Was below the water?
 - A Yes, sir.
- Q And you were unable to make a completion of this well, is that correct?
 - A That is correct.
- O In your opinion, would the injection of water into the Abo Formation as you propose, either in the open hole interval to 9,200 feet, or in the perforated zone, if you do go back and perforate it, have any adverse affect on the producing formation?
 - A No, sir, I do not think it would.
 - Q Is there any fresh water in this area?
 - A Only shallow fresh water.
- Q Your surface string, according to your exhibit, was cemented with 225 sacks. Was that circulated?
- A Yes, sir, that was circulated to the top between the twelve and three-quarter-inch casing.
- O Do you have the figure on the other cementing in this well?
- A Yes, sir, this well was completed as follows: we drilled an eleven-inch hole, and then set eight and five-eighths

-inch, thirty-two-pound J-55 casing at 3,579 feet KB. This string of casing was cemented with 200 sacks of cement. We then drilled seven and seven-eighths-inch holes to a total depth of the 9,122, and cemented a string of five and a half-inch casing. The casing was landed at 9,122 feet, cemented with 700 sacks of cement, and then the top of the liner, the liner being the five and a half-inch casing, was squeezed with 75 additional sacks of cement. The top of the five and a half-inch is up inside the eight and five-eighths-inch casing by 125 feet.

- Q Would that type of completion, in your opinion, afford adequate protection for any producing zones or any fresh water zones in this area?
 - A Yes, it would.
- Q I note that you have a two-inch tubing in the well at the present time set on a packer. Will that tubing be used for water injection?
- A Yes. I might correct that slightly. The tubing is not in the well at the present time, but we would propose to run the two-inch strings and set it as shown in the exhibit.
 - Will you use a plastic or cement-lined tubing?
- A If the analysis indicates that it is necessary, the water analysis, yes, we would coat the tubing internally.

- Q Will this water injection be through a closed system?
 - A Yes, sir, it will.
 - Q Do you have a water analysis?
 - A Yes, sir, I do.
- Q The third page of Exhibit 1, will you discuss that exhibit?
- A This is a pertinent information sheet, showing the top of the Midway Abo, 8,991 feet as shown on the log. It also indicates that the well tested the salt water throughout the perforated intervals as shown on one of the other exhibits. The water was analyzed from this well, and the chemical analysis in detail is shown on the exhibit.
- Q That is the analysis of the water found in this particular well?
 - A Yes, and it is comparable to the produced water.
 - Q You anticipate it would be about the same?
 - A Yes, sir.
- Q What pressures would you anticipate you will encounter on your injection?
- A Actually, the well may take water on a vacuum for quite some time because of the fluid withdrawals. We would not expect a greater pressure than 3,000 PSIG, and this would come

one or two years from now. Initially, we are talking about injecting the produced water from the Midway Abo Field in which we operate, and the volume would be something less than 100 barrels per day, and we put on here we expect up to a maximum of possibly 500 barrels a day.

() What would the source of that water be? You said Midway Abo Field, but would you have a disposal system for that entire field or just your operation?

A At the present time, we are contemplating it only for our operations. Of the area as shown on the plat, Consolidated is the major operator in this field. The three wells shown under SU, being Southern Union, are operated by Consolidated. So in the main part of the field, Gulf Oil is the only other operator, other than Texas and Sinclair on the west side.

- Q And it would be produced water from your operation that you would dispose of in this well?
 - A Yes, sir.
 - O Does Exhibit 1 also contain a log of the well?
 - A Yes, sir, it does.
- Q Was Exhibit 1 prepared by you or under your supervision?
 - A Yes, sir.

MR. KELLAHIN: I would like to offer Applicant's Exhibit 1.

MR. NUTTER: Applicant's Exhibit 1 will be admitted in evidence.

(Whereupon, Applicant's Exhibit Number 1 was admitted into evidence.)

MR. KELLAHIN: That is all I have on direct examination.

CROSS EXAMINATION

BY MR. NUTTER:

O Mr. Rodgers, you mentioned that the cement was circulated on the twelve and three-quarter-inch casing. What is the estimated top of the cement on the five and a half? You cemented it with 700 sacks.

A We didn't run a temperature survey, but this is shown on the exhibit. The estimate top of cement behind the five and a half is approximately 7,000 feet. Now, that is based on 50 per cent fill.

- Q That is just calculated?
- A Yes, sir.
- Q Then you have approximately 128 feet of overlap between the liner and the eight and five-eighths? Do you have an estimated top of the cement on the eight and five-eighths

-inch casing which was cemented with 200 sacks?

- Λ Calculations would indicate that we should have approximately 600 or 700 feet in there, and that would be based upon a 50 to 60 per cent fill.
- O Six hundred to 700 feet fillup, then, behind the casing?
 - A Yes, sir.
- O And what about the casing tubing annulus in this well? Will this be loaded with some sort of fluid?
- A Yes, sir, when the tubing is run with the packer, we would put inhibited water behind the tubing.
- Ω And you can equip that annulus with a pressure gauge in order to detect leakage in there?
 - A Yes, sir, we will.
- Q What do you mean if analysis indicates, that you will line the tubing? Do you propose to go ahead and run straight plain two-inch tubing at First?
- A We have a string of two-inch tubing which came from this well originally, and operating in the field for approximately five and a half years, we have not had any problem with corrosion from the water. So what I intended in this comment was that we would rather use the unlined tubing initially, and if, at any time we see any pressure on the back side or have any

other reason to believe we have corrosion occurring, then we would have to go ahead and plastic-coat or use cement lining.

- Q Would it be your plan to treat the water prior to disposal?
 - A We do not plan to treat the water, no, sir.
- Q So you would just take your chances, then, of using this plain tubing without treating the water, go ahead and dispose of it, and if you had a leak, then take remedial action thereafter?

A By keeping a closed system, by keeping oxygen out of the system, we should eliminate any probability of corrosion.

MR. NUTTER: Are there any other questions?

Mr. Rodgers, you may be excused. Do you have anything further,

Mr. Kellahin?

Is there anything that anyone wishes to say in Case No. 3979? We will take the case under advisement.

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STATE (OF	NEW	MEXICO)	
)	ss
COUNTY	OF	BEI	RNALITILO)	

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

CCURT REPORTER

I do hereby nortify that the foresteday is a complete repend of the process the Engliner heaving of these we. 39 heard by no on 12/2 196 un les Mexico Oil Conservation Commission

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico

Gil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



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

P. O. BOX 2088 SANTA FE

December 9, 1968

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Fost Office Box 1769 Santa Fe, New Mexico	Re:	Case No. Order No. R. Applicant: Consolidated	-3622	- Inc.
Dear Sir:				
Enclosed herewith are two copies mission order recently entered in			nced Com-	
A. 1	r truly Part PORTE retary-D	R, Jr.		
ALP/ir				
Carbon copy of order also sent t	:0:			
Hobbs OCC X				
Artesia OCC			,	
Aztec OCC				
Other State Engineer Offic	е			

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. 3979 Order No. R-3622

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 December 2, 1968, at Santa Fe, New Moxico, before Examiner Daniel S. Nutter.

NOW, on this 9th day of December, 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, Consolidated Oil & Gas, Inc., is the owner and operator of the Shipp Well No. 2, located in the NE/4 SE/4 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 and open-hole interval from approximately 8500 feet to 9200 feet.
- (4) That the injection should be accomplished through 2-inch tubing installed in a packer set at approximately 8500 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.
- (5) That coupon tests should be conducted continuously on said well in order to detect corrosion and the results filed

-2-CASE No. 3979 Order No. R-3622

quarterly with the Commission until further notice from the Secretary-Director of the Commission.

(6) 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. 2, located in the NE/4 SE/4 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-inch tubing installed in a packer set at approximately 8500 feet, with injection into the parforated and open-hole interval from approximately 8500 feet to 9200 feet;

PROVIDED HOWEVER, 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; that coupon tests shall be conducted continuously on said well and the results thereof filed quarterly with the Commission until further notice from the Secretary-Director of the Commission.

- (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
ONL CONSERVATION COMMISSION

DAVID P. CARGO, Chairman

TON BY HAYS, Member

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

GBT/

CASE 3978: Application of Texas Pacific Oil Company for sait water disposal, Lea bounty, New Mexico. Applicant, in the abovestyled cause, seeks authority to dispose of produced salt water into the Seven Rivers-Queen formations in the perforated interval from 3148 feet to 3450 feet in its McKinney Well No. 1 located in Unit A of Section 36, Township 24 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.

CASE 3979:

Application of Consolidated Oil & Gas, Inc., for salt water disposal. Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated and open-hole interval from 8500 feet to 9200 feet in its Shipp Well No. 2 located in the NE/4 SE/4 of Section 17, Township 17 South, Range 37 East, Midway-Abo Pool, Lea County, New Mexico.

CASE 3980:

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 in the perforated interval from approximately 9791 feet to 9954 feet in its State "22" Well No. 1 located in Unit I of Section 22, Township 14 South, Range 32 East, Tulk-Pennsylvanian Pool, Lea County, New Mexico.

CASE 3981: Application of Texaco, 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 Yates-Seven Rivers formations, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico, through the following two wells located in Section 34, Township 20 South, Range 34 East:

> B. V. Lynch "A" Federal Well No. 8 in Unit I; Disposal Interval - 3690 feet to 3753 feet;

B. V. Lynch "A" Federal Well No. 11 in Unit G; Disposal Interval - 3538 feet to 3617 feet.

CASE 3982: Application of Texaco, Inc. for a dual completion and water injection, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to dually complete its C. C. Fristoe "A" Federal NCT-1 Well No. 6 located in Unit D of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas through the casing-tubing annulus from the Jalmat Gas Pool in the perforated interval from 2708 feet to 2796 feet and



Consolidated Cil & Gas, Inc.

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

> Application of Consolidated Oil & Gas, Inc. for Approval of a Salt Water Disposal Well

> > Midway-Abo Field Lea County, New Mexico

> > > BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION COMMISSION

CASE NO. 397.9

Diagrammatic Skatch - Shipp No. 2 NE SE Sec. 17-TITS-RBJE NIMPM Midway Abo Field, Lea County 12%" OD 23" 225 sx. 11" Hole T.O.L. @ 3,451' Squeezed 755X. 85/8" OD 32# J-55. 200 5X. 3,579 " Tubing 2 77/8" Hole Set PKr. Est. T. O.C. @ 7,000' (50% Fil) @ 8,500' 8,894 Squeezed with 755x. 8,924 8,932 8,942 9,000 9,020 · Squeezed Twice with 150 sx. plus 2,078 9,088' 75 5x. 2122' 5/2" Csg. 15.5#, 17#, 20# J-55 4 11-80 700 5X. of it . Has patient Drill 43/4" hole to 9,200 T.D.

PERTINENT INFORMATION

SHIPP NO. 2 NE SE Section 17-T17S-R37E Lea County, New Mexico

Formation: Midway-Abo

Top of Log: 8,991' KB

Total Depth: 9,122'

Present Status: Temporarily abandoned

Fluids Tested: Salt water

Water Analysis:

 Ca
 23,200 ppm

 Mg
 3,800 ppm

 Na
 39,400 ppm

 C1
 112,000 ppm

 SO_4 450 ppm H_2CO_3 480 ppm

Sp G. 1.150 pH 5.0

Max. Expected Surface

Pressure: 3,000 psig.

Max. Expected Water to be Injected: 500 BPD

Volumes to Inject Initially: 100 BPD

Source of Injection Fluid: Midway-Abo

Proposed Disposal Zone: Open hole and/or perf. zones in Abo.

JASON W. KELLAHIN

KELLAHIN AND FOX ATTORNEYS AT LAW

54% EAST SAN FRANCISCO STREET

POST OFFICE BOX 1789

SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315 AREA CODE 505

November 18, 1968

Care 3979

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

Re: Consolidated Oil & Gas, Inc., approval of a salt water disposal well

Lea County, New Mexico

Gentlemen:

Enclosed please find original and two copies of an application in re the above company, which please set for hearing on December 2, 1968.

Yours very truly,

Jason W. Kellahi

JASON W. KELLAHIN

jwk;peg Enc. as stated

DOCKET MANAGE

Date 11-2/68

Per para san kansa ansa ang kanana a

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF CONSOLIDATED OIL & GAS, INC., FOR APPROVAL OF A SALT WATER DISPOSAL WELL

Core 3979

APPLICATION

Comes now CONSOLIDATED OIL & GAS, INC., and applies to the Oil Conservation Commission of New Mexico for approval of a salt water disposal system in the Midway Abo Pool, Lea County, New Mexico, by utilization of its Shipp Well No. 2, located in the NE/4 SE/4 of Section 17, Township 17 South, Range 37 East, N.M.P.M., and in support thereof would show the Commission:

- 1. Consolidated Oil & Gas, Inc., is the operator of three producing wells on the Shipp "A" Lease in the Midway Abo Pool, said wells currently producing approximately 40 barrels of salt water per day.
- 2. Applicant proposes to deepen the Shipp Well No. 2 approximately fifty feet, and dispose of water in the open hole section in the well, in the Abo formation, which is presently producing from other wells in the area. The Shipp No. 2 is presently a temporarily abandoned well. As shown on the schematic diagram attached hereto, casing is presently set at 9122 feet. Applicant proposes to deepen to approximately 9200 feet.
- 3. If necessary to increase the disposal capacity of the well, the Midway Abo formation behind the casing will be reperforated.
 - 4. Injection will be through tubing, under a packer.
- 5. Water to be disposed of is produced water from the Midway Abo Pool. Initial plans call for disposal of

approximately 100 barrels of water per day, with possible increase to 500 barrels per day in the future.

6. Attached hereto are a plat showing location of the proposed disposal well, and all wells within a two mile radius of said well; a diagrammatic sketch of the proposed disposal well; an exhibit giving pertinent information on the proposed disposal project, and copy of the log of the proposed disposal well.

WHEREFORE, applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving use of the Shipp Well No. 2 for salt water disposal as prayed for.

Respectfully submitted,
CONSOLIDATED OIL & GAS, INC.

KELLAHIN & FOX
Post Office Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

Township / 7 S. , Range 378. , County Lea , State Man Mariato C. O. G. 0 | 6 | 5 U.
0 | 6 | 6 U.
2 | 5 U. Min 03 C.O.G. 2 Taxaco Sinclair ShiPA 01 03 2Mila Chips FORM 45 MANUS POUR RANG CO. Inc.

Diagrammatic Smotch - Shipp No. 2 NESE Sec. 17-TITS-RETE NIME Midway Abo Field, Lea County 123/2" 00 33# 225 sx. 11" Holes T.O.L. @ 3,451' Squeezed 755x. 3,579' 3 8 5/8" OD 32# J-55 200 sx. " Tubing 2 77/8" Hole Set Par Est. T.O.C. Q 7,000' (50% Fill) @ 8,500' 8,894 8,924 8,932 8,942 Squeezed with 755x 9,000 9,020 Squeezed Twice with 150 sx. plus 9,078' 9,088' 75 5X. 2122' 5/2" Csg. 15.5#, 17#, 20# J-55 4 N-80 700 5X. Drill 43/4" hole to 9,200 T.D.

PERTINENT INFORMATION

SHIPP NO. 2 NE SE Section 17-T17S-R37E Lea County, New Mexico

Formation: Midway-Abo

8,991' KB Top of Log:

9,1221 Total Depth:

Present Status: Temporarily abandoned

Fluids Tested: Salt water

Water Analysis:

Ca 23,200 ppm 3,800 ppm Mg Na 39,400 ppm C1 112,000 ppm 50_4 450 ppm H_2CO_3 480 ppm

1.150 Sp G. 5.0

Max. Expected Surface

pH

3,000 psig. Pressure:

Max. Expected Water to

be Injected: 500 BPD

Volumes to Inject Initially: 100 BPD

Source of Injection Fluid: Midway-Abo

Proposed Disposal Zone: Open hole and/or perf. zones in Abo. GMH/esr

BEFORE THE DIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

MY

J.J.

CASE No. 3979

Order No. R-3622

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 <u>December 2</u>, 1968, at Santa Fe, New Mexico, before Examiner <u>Daniel S. Nutter</u>

NOW, on this <u>day of <u>December</u>, 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,</u>

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. 2

 the NE/4 SE/4
 located in V///// of Section 17, Township 17 South, Range

 37 East, NMPM, Midway-Abo Pool Lea

 County, New Mexico.
- dispose of produced salt water into the Abo

 formation, with injection into the open-hole interval

 from approximately 8500 feet to 9200 feet.
- (4) That the injection should be accomplished through a complished through a complished through a packer set at

approximately <u>85.00</u> feet; that the casing-tubing annulus in relable 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

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

IT IS THEREFORE CRDERED:

(1) That the applicant, Consolidated Oil & Gas, Inc.

is hereby authorized to utilize its Shipp Well No. 2

located in UN/V/// 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

-inch tubing installed in a packer set at approximately perforated and

5500 feet, with injection into the open-hole interval

from approximately 8500 feet to 9200 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-limed; 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 does necessary

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

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newspapus

Consolidated Die & Has, Inc., for

5W

Lea County
Shipp Well no. 2

NE14 SE14 - Sec 17, T 175, R37E

abo formation

perforated and apren-lule 8500-9200

ft.

midway abo

son

DOCKET MARSO

Date 11-2/68

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