

CASE 4011: Application of SAM D.
ARES FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

- dse Number

4011

Application

Transcripts.

Small Exhibits

ETC.

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

1120 SIAMS BLDG. • P. O. BOX 1092 • PHONE 243-6611 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

December 27, 1968

EXAMINER HEARING

IN THE MATTER OF:)

Application of Sam D. Ares)
for salt water disposal,)
Lea County, New Mexico.)

Case No. 4011

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4011.

MR. HATCH: Case 4011, application of Sam D. Ares for salt water disposal, Lea County, New Mexico.

MR. McDERMOTT: If the Examiner please, W. H. McDermott, appearing on behalf of the applicant, Sam D. Ares. We have one witness to be sworn in.

(Witness sworn.)

(Whereupon, Applicant's Exhibits A, B, and C, were marked for identification.)

EVERETT L. SMITH

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

DIRECT EXAMINATION

BY MR. McDERMOTT:

Q Will you state your name, please?

A Everett L. Smith.

Q By whom are you employed?

A Sam D. Ares.

Q In what capacity are you employed?

A Consulting Engineer.

Q Have you ever testified before the Oil Commission before?

A Yes, sir.

Q And have your qualifications been presented to the Commission?

A Yes.

MR. McDERMOTT: Are his qualifications acceptable?

MR. NUTTER: They are.

Q Are you familiar with the application of Sam D. Ares in Case No. 4011 before the Commission?

A Yes.

Q Briefly, would you state to the Commission what is proposed by this application?

A To inject salt water into open-hole, 3520 to 3639.

Q What is the status of the well at this present time?

A It is temporarily abandoned.

Q Let me show you what has been marked as Exhibit A. Would you identify that and explain it?

A It is a plat showing all wells within a two-mile radius of the proposed injection well.

Q Does it show all the producing wells within the two-mile area?

A Yes.

Q What is the producing area in this zone?

A Yates-Seven Rivers.

Q Are all the wells in this area producing from the zone?

A Yes.

Q Is there any other producing zone in this area?

A No.

Q Which of the wells shown on Exhibit A do you contemplate using for disposal of the produced water?

A Charles Whitten No. 5.

Q How many wells do you contemplate disposing of water?

A Four.

Q How much water do you estimate to be disposed of from these wells?

A One hundred to 150 barrels per day.

Q And in what zone are you planning to dispose the water into?

A Yates-Seven Rivers.

Q Do you have a log of the injection well?

A Yes, Exhibit B.

Q Will you explain what has been marked as Applicant's Exhibit B?

A It shows the log of the well to the proposed injection zone.

Q What is the history of this well?

A It was completed in August, 1938, by the Sinclair Oil and Gas, and purchased from Sinclair as a shut-in gas well, and

was put on a pump and made an oil well on December 4, 1964, and produced oil until April 1, 1968.

Q Referring to what has been marked as Exhibit C, is this a diagrammatic sketch of the casing to be used on the proposed injection well?

A Yes.

Q At what depth does the water go in?

A Through open-hole from 3520 to 3639.

Q Would you further explain this particular Exhibit C to the Commission?

A This Exhibit C shows the diagrammatic sketch of the casing program of the well and the proposed injection zone. The surface pipe is nine and five-eighths-inch casing set at 441 feet, and cemented with 400 sacks of cement. The cement was circulated to the surface. And it has seven-inch casing set at 3,520, and cemented with 250 sacks.

Q What is the status of the cement above the liner?

A There would be no liner, not in this well.

Q What are the open-hole intervals in this?

A It is 3520 to 3639.

Q And the size of the pipe to be used in the injection process?

A Two and a half-inch tubing.

Q What type of pipe or tubing do you plan on using?

A Plastic-coated.

Q Does this have a complete and tight cement job from top to bottom?

A Yes.

Q And in the annulus, what would it be filled with?

A Filled with a non-corrosive fluid.

Q What kind of fluid will be injected in here?

A Produced oil fill brine.

Q This is to go into the Seven Rivers zone, is that correct?

A Right.

Q Will this zone take the produced water that you plan to inject?

A Yes.

Q How is that?

A We believe it will take it on a vacuum.

Q Will you have any kind of a gauge at the top?

A Yes, there will be a gauge at the annulus at the top.

Q If this application is not granted, what would be the result?

A The leases will have to be plugged.

Q Do you contemplate any type of waste through this

process?

A No, this will eliminate waste in that it possibly will maybe increase, at least it will increase the life of the leases that are going to inject water into this well, and it might have some repressuring effect on it.

Q Will this affect any of the correlative rights of any of the other wells in this area?

A No.

Q Is there any corrosive effect of the water?

A Very little.

Q If the water that is injected, is it potable at all?

A No, it is salt water.

MR. McDERMOTT: At this time, I would like to move for the admission of all exhibits.

MR. NUTTER: Applicant's Exhibits A, B, and C will be admitted in evidence. I believe that is what they were.

(Whereupon, Applicant's Exhibits A, B, and C, were admitted in evidence.)

MR. McDERMOTT: Yes. This completes our direct examination.

MR. NUTTER: Does anyone have any questions of Mr. Smith?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Smith, I presume, referring to Exhibit A, that the four wells that will be producing the brine are these four wells that run up and down the east side of that Section?

A There are two wells on there, Sam Ares Whitten Lease in Section 4.

Q Numbers 3 and 4?

A Yes, sir. And then on the Ed Watts-Whitten Lease in Section 33, there will be two wells. That is the four wells going into this injection well.

Q Which would those two wells be, please?

A In Section 33. Let me get 33 here.

Q That is immediately north of Section 4?

A It will be Numbers 1 and 2.

Q They are in the southeast quarter?

A Yes, sir.

Q And those four wells together are making from 100 to 150 barrels of salt water per day?

A Yes, sir, at the present time.

Q Now, what is the top of the cement on this seven-inch pipe, Mr. Smith?

A That, I do not have. It was drilled back in 1938 by

Sinclair, and they did not run a temperature survey, so we do not have the top of the cement.

Q You do know it was cemented with 250 sacks?

A Yes, sir.

Q Do you know the size of the hole?

A No, sir, I don't have the size of the hole.

Q It was drilled out from under nine and five-eighths-inch casing, so it is probably eight and three-quarter, something like that?

A Yes, sir.

Q At any rate, the surface casing was cemented to the surface?

A Yes, sir, circulated.

MR. NUTTER: Any further questions of Mr. Smith? You may be excused. Do you have anything further, Mr. McDermott?

MR. McDERMOTT: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4011? We will take the case under advisement, and call Case 4012.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
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<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits A, B, and C	2	7

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

I, SAMUEL 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.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is a true and correct record of the proceedings in the Bernalillo Hearing of Case No. 4011, heard by me on 12/27, 1968.

[Signature]
 New Mexico Oil Conservation Commission

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2088
SANTA FE

December 31, 1968

Mr. W. H. McDermott
Attorney at Law
Lincoln Building
Post Office Box 1143
Santa Fe, New Mexico

Re: Case No. 4011
Order No. R-3655
Applicant:
Sam D. Ares

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

Carbon 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. 4011
Order No. R-3655

APPLICATION OF SAM D. ARES
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 27, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st 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, Sam D. Ares, is the owner and operator of the Charles Whitten Well No. 5, located in Unit B of Section 4, Township 24 South, Range 36 East, NMPM, Jalmat Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Yates-Seven Rivers formations, with injection into the open-hole interval from approximately 3520 feet to 3639 feet.

(4) That the injection should be accomplished through 2 1/2-inch plastic-lined tubing installed in a packer set at approximately 3420 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. 4011
Order No. R-3655

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:

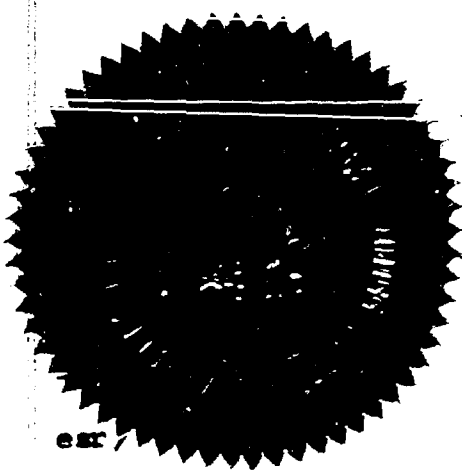
(1) That the applicant, Sam D. Ares, is hereby authorized to utilize his Charles Whitten Well No. 5, located in Unit B of Section 4, Township 24 South, Range 36 East, NMPM, Jalmat Pool, Lea County, New Mexico, to dispose of produced salt water into the Yates-Seven Rivers formations, injection to be accomplished through 2 1/2-inch tubing installed in a packer set at approximately 3420 feet, with injection into the open-hole interval from approximately 3520 feet to 3639 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 his 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

DOPPEL: EXAMINER HEARING - WEDDAY - DECEMBER 27, 1968

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

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

- CASE 4005: Application of Petroleum Corporation of Texas for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation in the perforated interval from 9783 to 9946 feet in its State HTB Well No. 1 located in Unit D of Section 31, Township 12 South, Range 34 East, East Hightower-Upper Pennsylvanian Pool, Lea County, New Mexico.
- CASE 4006: Application of Petroleum Corporation of Texas for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the San Andres formation through its Paton Federal Well No. 2 located in Unit N of Section 6, Township 18 South, Range 27 East, Red Lake Pool, Eddy County, New Mexico.
- CASE 4007: Application of Paul DeHaven for dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Bagley State Well No. 1 located in the NW/4 NW/4 of Section 34, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to produce oil from the Bagley-Pennsylvanian Pool and to dispose of produced water down the annulus between the production casing and the intermediate casing into the San Andres, Garry, and possibly other formations in the interval from approximately 7700 feet to 7858 feet.
- CASE 4008: Application of Paul DeHaven for dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Shell State Well No. 1 located in the NW/4 NW/4 of Section 19, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to produce oil from the Bagley-Pennsylvanian Pool and to dispose of produced water down the annulus between the production casing and the intermediate casing into the San Andres, Garry, and possibly other formations in the interval from approximately 7400 feet to 7800 feet.

CASE 4009: Application of Humble Oil & Refining Company for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4273 feet to 4329 feet in its New Mexico "BX" State Well No. 3 located in Unit G of Section 16, Township 8 South, Range 33 East, Chaveroo-San Andres Pool, Chaves County, New Mexico.

CASE 4010: Application of John H. Trigg for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg-San Andres formations through his Empire "J" Federal Well No. 1 located in Unit P of Section 1, Township 18 South, Range 26 East, Red Lake Grayburg-San Andres Pool, Eddy County, New Mexico.

CASE 4011: Application of Sam D. Ares 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 formation in the open-hole interval from approximately 3520 feet to 3639 feet in his Charles Whitten Well No. 5 located in Unit B of Section 4, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 4012: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3602 to authorize the disposal of produced salt water into the Yates-Seven Rivers formations in the open-hole interval from approximately 3363 feet to 3650 feet in his Everett Well No. 4, located in Unit M, Section 35, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico. The subject disposal well would be in lieu of the Everett Well No. 2, previously authorized for disposal by Order No. R-3602.

CASE 4013: Application of Redfern Development Corporation and Wil-Mo Oil Corporation for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the San Andres formation in the interval from approximately 4200 feet to 4300 feet in the Wil-Mo State Well No. 1-K, located in Unit O of Section 11, Township 10 South, Range 32 East, Mescalero-San Andres Pool, Lea County, New Mexico.

December 27, 1968 - Examiner Hearing

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Docket No. 41-68

CASE 4014: Application of Ralph Lowe for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Devonian formation in the perforated interval from approximately 12,350 feet to 12,455 feet in his "C" Devonian Unit Well No. 1 located in Unit O of Section 16, Township 10 South, Range 36 East, South Crossroads-Devonian Pool, Lea County, New Mexico.

CASE 3991: (Continued and Readvertised)

Application of Roger C. Hanks, Ltd., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the lower Devonian formation in the open-hole interval from approximately 10,804 feet to 10,885 feet in its Monterey State Well No. 1 located in Unit A of Section 11, Township 10 South, Range 32 East, Mescalero Field, Lea County, New Mexico.

CASE 4015: Application of Wilson Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico, through the following six wells:

TOWNSHIP 21 SOUTH, RANGE 34 EAST

Wilson State Well No. 9 located in Unit F of Section 13;

Shell State Well No. 13 located in Unit H of Section 13;

Wilson State Well No. 8 located in Unit G of Section 13;

Wilson State Well No. 20 located in Unit B of Section 23;

Wilson State Well No. 21 located in Unit J of Section 23;

TOWNSHIP 21 SOUTH, RANGE 35 EAST

Wilson State Well No. 1-A located in Unit G of Section 7;

Applicant further seeks an administrative procedure whereby other wells in said pool may be approved for disposal purposes without the requirement of notice and hearing.

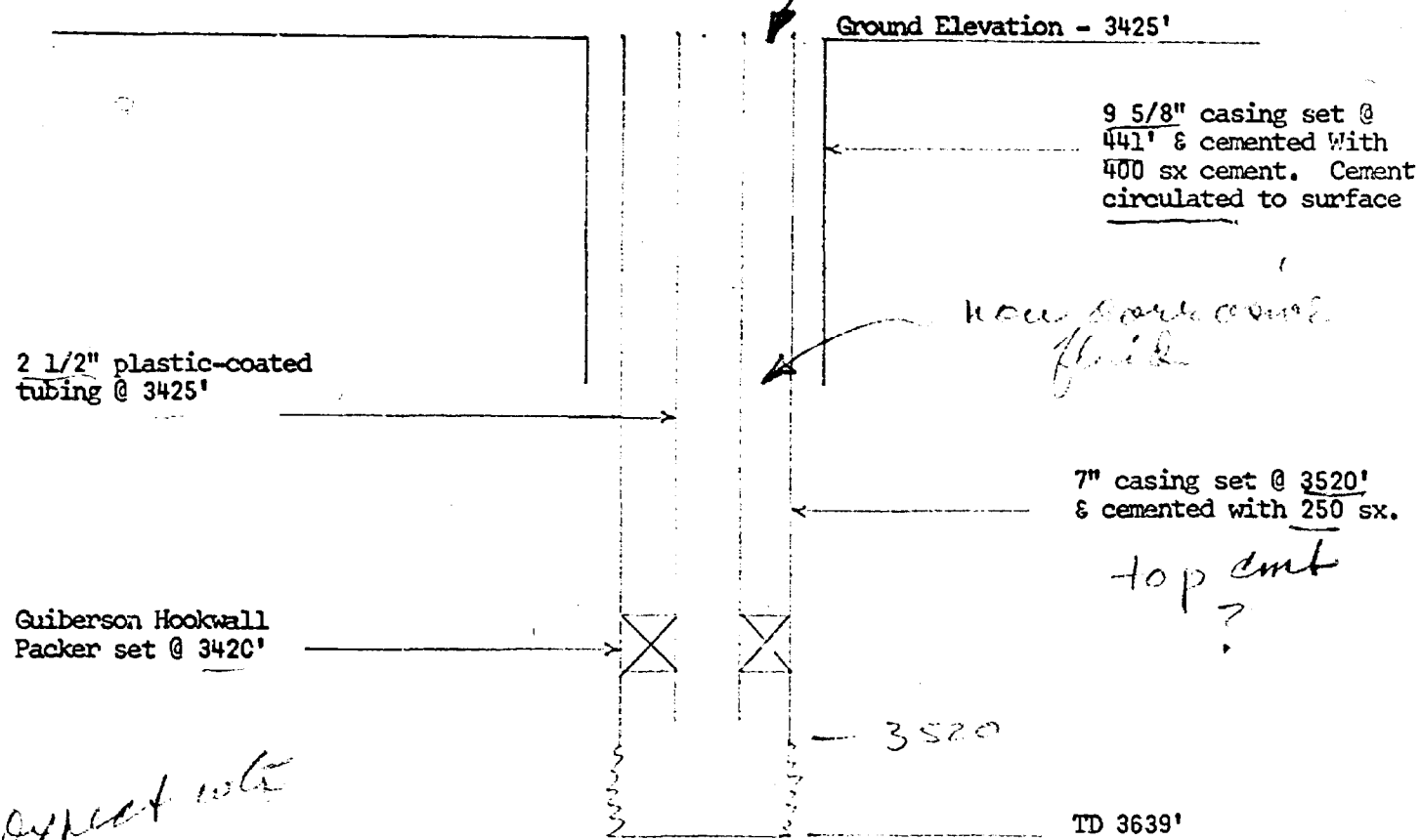
Exhibit 'C'

PROPOSED DIAGRAMMATIC SKETCH
SALT WATER DISPOSAL COMPLETION

SAM D. ARES

Charles Whitten #1

Sec. 4-24S-36E
Jalmat Pool, Lea County, New Mexico



*expect water
to go on
formation*

water not cemented

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
<i>Opp</i>	EXHIBIT NO. <i>12</i>
CASE NO.	<i>4011</i>

Oil Reports and Gas Services

P. O. BOX 763
HOBBS, NEW MEXICO

W. L. SMITH, OWNER

December 3, 1968

MAILED
'68 DEC 4 PM 1 21

EX 3-2727

Case 4011

State of New Mexico
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Gentlemen:

In accordance with Rule 1203, application is hereby made on behalf of Sam D. Ares for an Examiner Hearing before the Oil Conservation Commission for the purpose of presenting evidence to obtain Commission approval to dispose of produced oil field brine by injection into the Yates-Seven Rivers formation.

Said injection to be made into Sam D. Ares - Charles Whitten No. 5, located 330 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico; injection to be through 2 1/2" plastic coated tubing below packer to be set at approximately 3450 feet into open hole interval 3520 to 3639 feet.

Water to be so disposed will be produced from the Yates-Seven Rivers formation from the following leases:

Sam D. Ares - Charles Whitten - Section 4, T24S, R36E - Jalmat Pool
Ed E. Watts - Whitten - Section 33, T23S, R36E - Jalmat Pool

Interested parties who have this day been furnished a copy of this application:

Sam D. Ares
Box 2306
Odessa, Texas

Argus Production Co.
3313 Republic Bank Bldg.
Dallas, Texas

Atlantic Richfield Co.
Box 352
Midland, Texas

E. P. Campbell Estate
Atten: Chardc Pierce
1603 Broadway
Lubbock, Texas

Continental Oil Co.
Box 460
Hobbs, New Mexico

Gackle Drilling Co.
Box 2038
Hobbs, New Mexico

DOCKET FILED

Date 12-17-68

State of New Mexico
Oil Conservation Commission
December 3, 1968

Page 2.

Gulf Oil Corp.
Box 670
Hobbs, New Mexico

Skelly Oil Co.
Box 1727
Midland, Texas

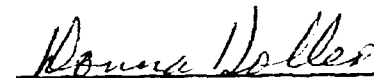
Humble Oil & Refining Co.
Box 1600
Midland, Texas

Ed E. Watts
Box 187
Midland, Texas

Sinclair Oil Corp.
Box 1470
Midland, Texas

Yours very truly,

OIL REPORTS AND GAS SERVICES.


(Mrs.) Donna Holler
Agent, Sam E. Ares

DH

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. 4011

Order No. R- 3655

[Handwritten signature]
APPLICATION OF SAM D. ARES
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 27 1968,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this _____ 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, Sam D. Ares
is the owner and operator of the Charles Whitten Well No. 5
located in Unit B of Section 4, Township 24 South Range
36 East, NMPM, Jalmat Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Yates-Seven Rivers
formations, with injection into the open-hole interval
from approximately 3520 feet to 3639 feet.

(4) That the injection should be accomplished through
2 1/2-inch plastic-lined tubing installed in a packer seal

approximately 3420 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, Sam D. Ares,
is hereby authorized to utilize ^{his} ~~its~~ Charles Whitten Well No. 5
located in Unit B of Section 4, Township 24 South, Range
36 East, NMPM, Jalmat Pool, Lea
County, New Mexico, to dispose of produced salt water into the
Yates-Seven Rivers formation, injection to be accomplished through
2 1/2-inch tubing installed in a packer set at approximately
3420 feet, with injection into the open-hole interval
from approximately 3520 feet to 3639 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~~ his
disposal operations in accordance with Rules 104 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 hereinafter
designated.