

CASE 4521: Application of EASTERN
RECORDS CO. for RECORDS DESTRUCTION,
SAN JUAN COUNTY, NEW MEXICO.

Case Number

4907

Application

Transcripts.

Small Exhibits

ETC.

dearnley, meier & mc cormick

209 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87103
1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE ROOM, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
February 28, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Eastern Petroleum Company
for water disposal, San Juan County,
New Mexico.

Case No. 4907

BEFORE: Elvis A. Utz
Examiner

TRANSCRIPT OF HEARING

1 MR. UTZ: Call Case 4907.

2 MR. CARR: Case 4907. Application of Eastern
3 Petroleum Company for water disposal, San Juan County, New
4 Mexico.

5 MR. McDERMOTT: W. H. McDermott, appearing for
6 Eastern Petroleum. And Mr. Fullop appearing as a Witness.
7 Here are some exhibits. How many do you need?

8 MR. CARR: We need two copies.

9 MR. UTZ: Do we have one set marked?

10 (Whereupon, Mr. Robert A. Fullop was called to the
11 stand and sworn.)

12 * * * * *

13 ROBERT A. FULLOP,
14 having been first duly sworn according to law, upon his oath,
15 testified as follows:

16 DIRECT EXAMINATION

17 BY MR. McDERMOTT

18 Q Would you state your name, please?

19 A Robert Fullop.

20 Q What is your position with Eastern Petroleum?

21 A Vice President.

22 Q What is your educational background?

23 A Graduate of the University of Oklahoma.

24 Q In what?

25 A Business Administration, major Finance. Minor is

1 Marketing in PLM.

2 Q What is your position with Eastern Petroleum Company?

3 A I'm in charge of production and exploration.

4 Q You have an application here for authority to dispose
5 and produce water in the Dakota formation through
6 Navajo Well Number 21, located in Unit C of Section 3,
7 Township 27 North, 17 West, Table Mesa-Dakota Oil Pool,
8 San Juan County, New Mexico.

9 Would you explain to the Examiner the present
10 situation on the water and how it is being handled at
11 the present time?

12 A Yes, sir. Up until about three months ago, the water
13 was being injected into wells Number 22 and 23 which
14 were legal injection wells in the Dakota formation.

15 However, due to circumstances surrounding injection,
16 such as corrosion in flow lines and well head equipment
17 with formation blockage due to sedimentation and
18 corrosion, injection in these wells has come to the point
19 of not being economically feasible.

20 Therefore, the water is being pitted until such
21 time that we can have approved injection of disposal
22 water into Navajo Number 21.

23 At this point, the water will be handled in a
24 similar situation whereby it is accumulated from the
25 wells in a gathering system run through a separation

1 process of separating the oil and water.

2 The water will be put in a reserve tank where it
3 will be injected into Navajo Number 1.

4 Q Well, to clarify that just a little bit, what is the
5 reason that you want to do this?

6 Is it economic in the sense --

7 A It's much more economic than it is to repair or to place
8 back in operation the present injection system.

9 Q Now, will this water go back in the same formation from
10 which it came?

11 A Yes, sir.

12 Q Will there be any damage as far as you know as a result
13 of this?

14 A No, sir. As listed in Exhibit A, there is two water
15 analyses. One analysis is of water currently in the
16 Dakota formation in 21, and the other analysis is an
17 analysis of the water to be injected into the wells.

18 Exhibit A, the first map which is a structure map,
19 the injection well is circled in red. The two producing
20 wells are Number 5 and Number 20 which are located in
21 the same structure.

22 Q Now, when this water goes back into the well, is it
23 going back into tubing or casing or how?

24 A It will be injected through the casing. The casing
25 being cemented from T.D. to surface with penetrations

1 in the Dakota formation only.

2 MR. McDERMOTT: I have no further questions of the
3 Witness.

4 CROSS-EXAMINATION

5 BY MR. UTZ

6 Q The oil disposal Wells Number 22 and 23 are in Units
7 N and O of Section 24, are they not?

8 A Yes, sir.

9 Q Now, what size surface casing do you have?

10 A In 21?

11 Q Yes.

12 A 21 has seven-inch.

13 Q Seven-inch surface casing, and where is it set?

14 A Just, oh, this would have to be an approximation. It's
15 a Continental Well. The records are not that readily
16 available. The surface is probably set around 60 feet
17 with five and a half casing set to T.D., cemented top
18 to bottom.

19 Q Okay. Do you intend to inject through tubing?

20 A No, into the casing.

21 Q How old is this well?

22 A The well was drilled in around 1951, '52.

23 Q Is it your intention to test the casing in this well?

24 A Yes, sir. You can pressure test up to the formation,
25 pressure or to pack it off and test it.

- 1 Q Now, will this be injected by pressure or gravity?
- 2 A You would have to inject in a Dakota formation with
- 3 pressure. The pressure will be right around 60 pounds.
- 4 Q 60 pounds surface?
- 5 A Yes, sir.
- 6 Q Now, what is the T.D.?
- 7 A I really don't have the exact T.D. on that well. I
- 8 failed to bring a copy of the application for disposal
- 9 with me. It is listed in it, though.
- 10 Q I don't see it.
- 11 A Should be approximately 1,300 feet.
- 12 Q 1,300 feet?
- 13 A Yes, sir.
- 14 Q So your bottom-hole pressure should be something in the
- 15 neighborhood of a thousand pounds?
- 16 A I wouldn't be able to say on that.
- 17 Q Well, is this saline water or fresh water?
- 18 A Fresh water. It's Dakota formation water.
- 19 Q Now, about a half pound per foot, 1,300 feet. So it
- 20 will be under a thousand pounds?
- 21 A Right.
- 22 Q Did you test the casing pressure up to a thousand pounds?
- 23 A Yes, sir. We can pack off the bottom above the
- 24 perforations and test it in that manner.
- 25 Q Is this water coming from producing wells in this area?

1 A Yes, sir.

2 Q Is it Dakota water?

3 A Yes, sir.

4 Q I believe you gave us some analyses here, is that correct?

5 A Yes, sir. They are the last two pages of Exhibit A.

6 The last page is of the water to be injected. The first
7 page is of the water in the well.

8 Q Did you say you are having corrosion problems in the
9 old wells?

10 A The old wells did acquire corrosion problems due to
11 failure of Continental Oil Company to add any type of
12 corrosion pivoter at that point of which this would be
13 employed in our system as it would be beneficial to have
14 the same thing happen to this well.

15 Q Do you check that periodically with the coupon method?

16 A Yes, sir.

17 MR. UTZ: Are there other questions of the Witness?

18 MR. McDERMOTT: I'd like to move the exhibits at
19 this time.

20 MR. UTZ: Is this Exhibit A in three parts?

21 MR. McDERMOTT: Yes, sir, four pages.

22 MR. UTZ: Without objection, the Exhibit will be
23 entered into the record.

24 Are there other questions of the Witness? He may
25 be excused. Any statements in the case? The case will be

1 taken under advisement.

2 * * * * *

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

5 I, JANET RUSSELL, a Notary Public, in and for the County
6 of Bernalillo, State of New Mexico do hereby certify that the
7 foregoing and attached Transcript of Hearing before the New
8 Mexico Oil Conservation Commission was reported by me; and
9 that the same is a true and correct record of the said
10 proceedings to the best of my knowledge, skill and ability.

11
12
13 Janet Russell
NOTARY PUBLIC

14
15 My Commission Expires:
16 November 24, 1976
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23 I do hereby certify that the foregoing is
24 a complete record of the proceedings in
the Examiner hearing of Case No. 4907
heard by me on 2/28/73, 1973.
25 Michael J. H. [Signature] Examiner
New Mexico Oil Conservation Commission

1

I N D E X

2

WITNESS

3

ROBERT A. FULLOP

4

Direct Examination by Mr. McDermott

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Cross-Examination by Mr. Utz

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E X H I B I T S

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ADMITTEDOFFERED

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Exhibit A

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OIL CONSERVATION COMMISSION

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

GOVERNOR
BRUCE KING
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

March 16, 1973

Mr. W. H. McDermott
McDermott & Connelly
Attorneys at Law
Post Office Box 1904
Santa Fe, New Mexico

Re: Case No. 4907

Order No. R-4488

Applicant:

Eastern Petroleum 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.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC X

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. 4907
Order No. R-4488

APPLICATION OF EASTERN PETROLEUM
COMPANY FOR WATER DISPOSAL, SAN
JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 28, 1973, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 16th day of March, 1973, 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, Eastern Petroleum Company, is the owner and operator of the Navajo Well No. 21, located in Unit C of Section 3, Township 27 North, Range 17 West, NMPM, Table Mesa-Dakota Oil Pool, San Juan County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced water into the Dakota formation, with injection into the open-hole interval from approximately 1371 feet to 1432 feet.

(4) That the injection should be accomplished through the 5 1/2-inch casing, provided however, said casing should be pressure tested to satisfactorily withstand 1000 psi prior to being used for disposal.

(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, Eastern Petroleum Company, is hereby authorized to utilize its Navajo Well No. 21, located in

-2-

Case No. 4907
Order No. R-4488

Unit C of Section 3, Township 27 North, Range 17 West, NMPM, Table Mesa-Dakota Oil Pool, San Juan County, New Mexico, to dispose of produced water into the Dakota formation, injection to be accomplished through 5 1/2-inch casing with injection into the open-hole interval from approximately 1371 feet to 1432 feet;

PROVIDED HOWEVER, that the casing shall be pressure tested to satisfactorily withstand a minimum pressure of 1000 psi prior to being used for disposal.

(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



Bruce King
BRUCE KING, Chairman

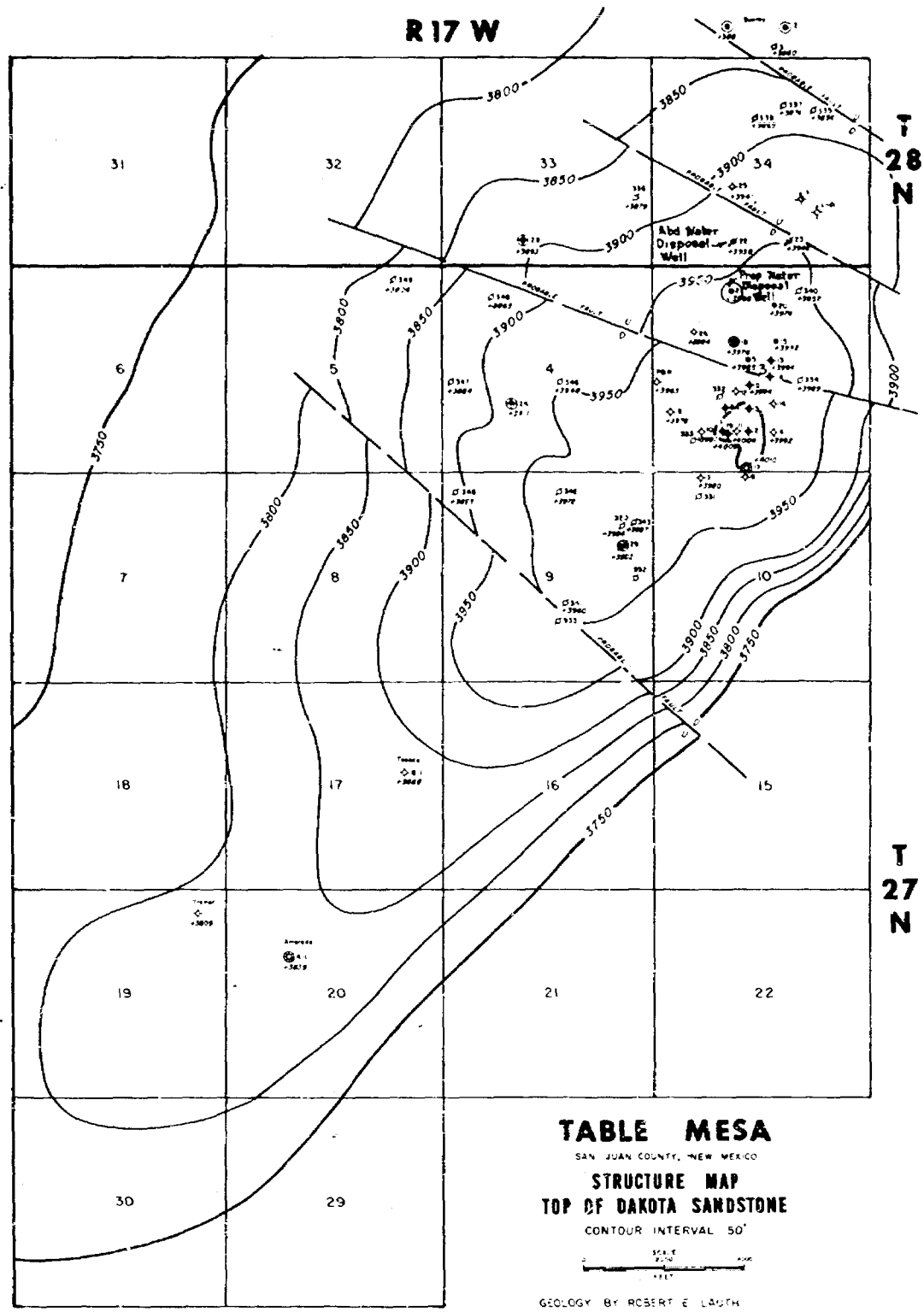
Alex J. Armijo
ALEX J. ARMILLO, Member

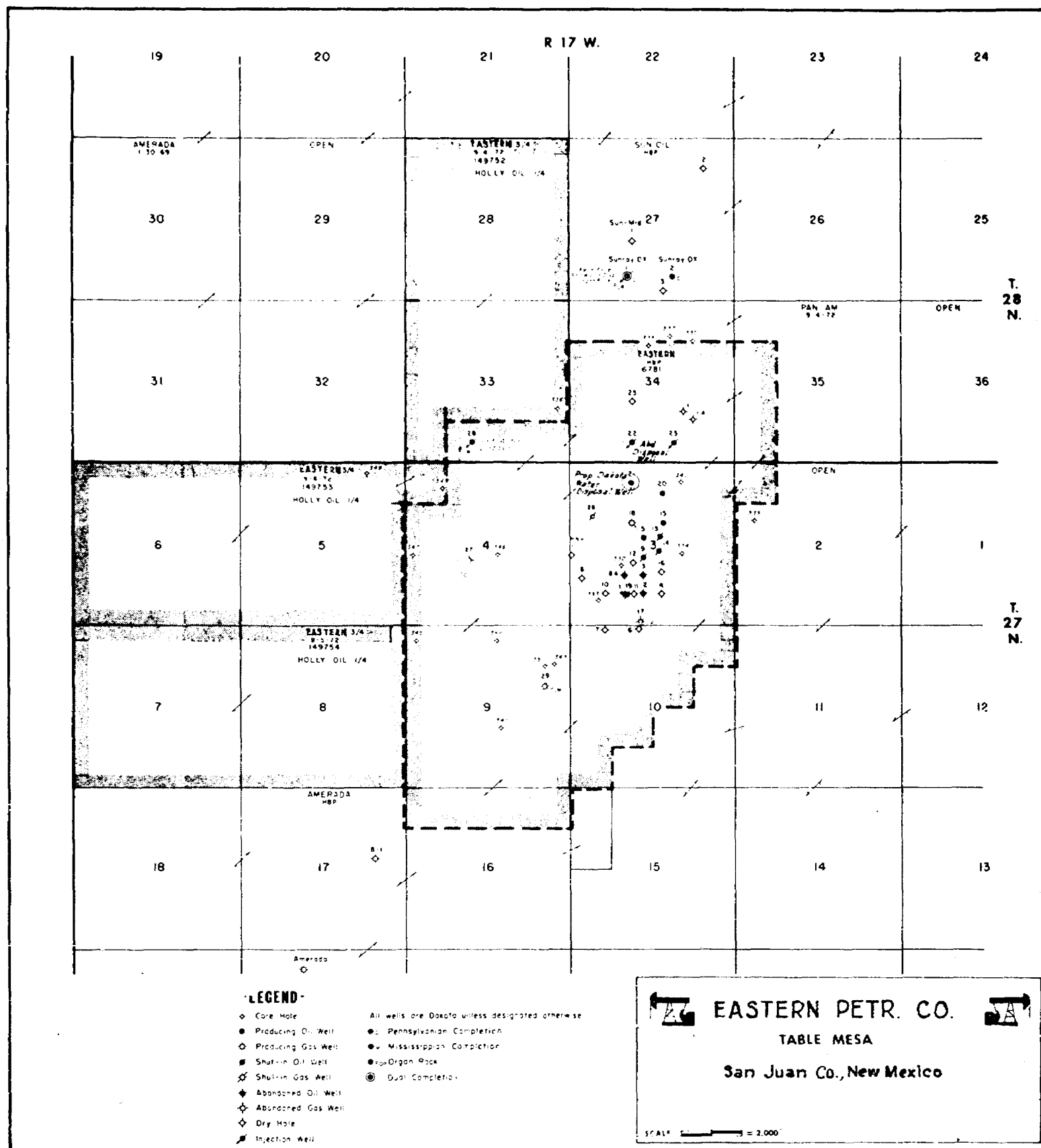
A. L. Porter Jr.
A. L. PORTER, Jr., Member & Secretary

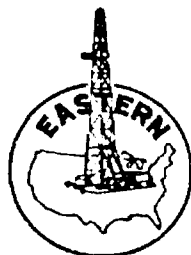
S E A L

dr/

Exhibit A







EASTERN PETROLEUM CO.

P. O. BOX 291 • CARMi, ILLINOIS 62821
POST OFFICE BOX 226
FARMINGTON, NEW MEXICO 87401

WATER ANALYSIS

Lease: Table Mesa

Formation: Dakota

Operator: Eastern Petroleum Company

Well: Navajo No. 21

Location: 660 FNL, 198 FWL

Sec. 3 Twp. 27N Rwg: 17W

<u>CONSTITUENTS</u>	<u>PPM</u>	<u>MEQ</u>	<u>MEQ%</u>
Sodium	1,227	53.38	48.52
Calcium	27	1.17	1.06
Magnesium	5	0.41	0.37
Sulfate	1,806	37.56	34.17
Chloride	340	9.59	8.72
Carbonate	60	2.00	1.82
Bicarbonate	354	5.81	5.29
Hydroxide	-	-	-

Observed ph - 8.7

Chloride

as Na Cl - 561



EASTERN PETROLEUM CO.

P. O. BOX 291 • CARMI, ILLINOIS 62821
POST OFFICE BOX 226
FARMINGTON, NEW MEXICO 87401

WATER ANALYSIS

Lease: Table Mesa

Formation: Dakota

Operator: Eastern Petroleum Company

Well: Water to be injected

Location: Table Mesa Lease

<u>CONSTITUENTS</u>	<u>PPM</u>	<u>MEQ</u>	<u>MEQ%</u>
Sodium	1,226	53.38	48.52
Calcium	27	1.17	1.06
Magnesium	5	0.41	0.37
Sulfate	1,805	37.56	34.17
Chloride	338	9.59	8.72
Carbonate	60	2.00	1.82
Bicarbonate	354	5.81	5.29
Hydroxide	-	-	-

Observed ph - 8.7

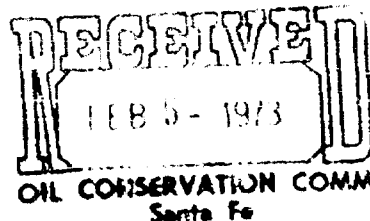
Chloride

as Na Cl - 561

LAW OFFICES

McDERMOTT & CONNELLY

W. H. McDERMOTT
HARRY S. CONNELLY, JR.



P. O. BOX 1904
LINCOLN BUILDING
101 WEST MADRY
SANTA FE
NEW MEXICO 87501
(505) 983-6373

February 5, 1973

Case 4907

Mr. A. L. Potter, Jr.
Secretary-Director
Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Re: Case No. 4898 - Application of Eastern Petroleum Co.

Dear Mr. Potter:

On Wednesday, January 31, 1973, I appeared for Eastern Petroleum Company on the above case. At that time I asked that the case be dismissed.

I would like to have this matter set up for your next hearing, which I understand is the 28th of February.

The company was concerned about the use of the term "salt water disposal". In reviewing this with Mr. Nutter, I found out that it applied to the disposal of produced water within two miles of production.

Therefore, I would appreciate it if you would consider this as a formal application to have Eastern Petroleum's application for the disposing of produced water in the area set forth in case no. 4898.

Yours very truly,

A handwritten signature in dark ink, appearing to read "W. H. Mc Dermott".

W. H. Mc Dermott

WHMcD/gb

DOCKET MAILED

Date *2-16-73*

Navajo Well No. 21

Unit C - Sec. 3

T-27N - R17W - Table Mountain - Dakota formation

Case 4907

Revd 2-28-73

Rec. 3-2-73.

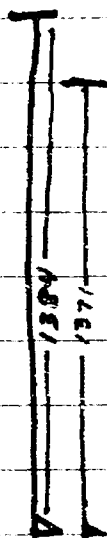
Grant Texas Eastern permission
to convert their Navajo #21 C-3
27N-17W, Table Mesa. Dk oil pool
to a SWD injection well. Injection
to be in the Dk. at approx 1300
ft. thru 5 1/2" casing. Casing
to be tested before injection to
1000#. Injected to 6 will be
treated to prevent corrosion.

[Signature]

5 1/2 pipe @ 1384 RB

1961 completed 1385 - 1419

1962: completed open hole 1371 Gr to 1432 Gr
no subsequent workover reported.



DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

APPLICATION OF EASTERN PETROLEUM
COMPANY FOR WATER DISPOSAL, SAN
JUAN COUNTY, NEW MEXICO.

CASE No. 4907

Order No. R- 4488

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NOW, on this day of March, 1973, 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
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(2) That the applicant, Eastern Petroleum Company,
is the owner and operator of the Navajo Well No. 21,
located in Unit C of Section 3, Township 27 North, Range
17 West, NMPM, Table Mesa-Dakota Oil Pool, San Juan
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced ~~oil~~ water into the Dakota
formation, with injection into the open-hole interval
from approximately 1371 feet to 1432 feet.

(4) That the injection should be accomplished through the
5 1/2 -inch casing, provided however, ~~the~~ said casing should be
plastic lined tubing installed in a packer set at

CASE No. _____

pressure tested to satisfactorily withstand 1000 psi
~~approximately _____ feet, that the casing tubing annulus should~~
~~prior to being used for disposal.~~
~~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, Eastern Petroleum Company,
is hereby authorized to utilize its Navajo Well No. 21,
located in Unit C of Section 3, Township 27 North, Range
17 West, NMPM, Table Mesa-Dakota Oil Pool, San Juan
County, New Mexico, to dispose of produced ~~oil~~ water into the
Dakota formation, injection to be accomplished through
5 1/2 ^{*casing*} ~~-inch tubing~~ installed in a packer set at approximately
_____ feet, with injection into the open-hole interval
from approximately 1371 feet to 1432 feet;

~~PROVIDED HOWEVER, that the tubing shall be plastic lined,~~
casing shall be pressure tested to satisfactorily withstand
~~that the casing tubing annulus shall be filled with an inert~~
a minimum pressure of 1000 psi prior to being used
~~fluid; and that a pressure gauge shall be attached to the annulus~~
for disposal.
~~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.