

CASE 3739: Application of NEW
MEXICO SALT WATER DISPOSAL CO.,
INC. FOR SALT WATER DISPOSAL.

Casa No.

3739

Application, Transcript,
Small Exhibits, Etc.

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

March 25, 1968

Mr. Sumner Buell
Montgomery, Federici, Andrews,
Hannahs and Morris
Attorneys at Law
Post Office Box 2307
Santa Fe, New Mexico

Re: Case No. 3739
Order No. R-3393
Applicant:

N.M. Salt Water Disposal Co.

Dear Sir:

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

Very truly yours,

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

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

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. 3739
Order No. R-3393

APPLICATION OF NEW MEXICO SALT WATER
DISPOSAL COMPANY, 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 March 20, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of March, 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, New Mexico Salt Water Disposal Company, Inc., is the owner and operator of the Trainer-Springs Well No. 1, located in Unit H of Section 11, Township 11 South, Range 34 East, NMPM, Sand Springs-Devonian Pool, Lea County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the perforated interval from approximately 13,128 feet to 13,207 feet.
- (4) That the injection should be accomplished through 3-inch internally plastic-coated tubing; that the casing-tubing annulus should be filled with a hydrostatically balanced column of inert fluid; 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.
- (5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

-2-

CASE No. 3739
Order No. R-3393

IT IS THEREFORE ORDERED:

(1) That the applicant, New Mexico Salt Water Disposal Company, Inc., is hereby authorized to utilize its Trainer-Springs Well No. 1, located in Unit H of Section 11, Township 11 South, Range 34 East, NMPM, Sand Springs-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through 3-inch tubing into the perforated interval from approximately 13,128 feet to 13,207 feet;

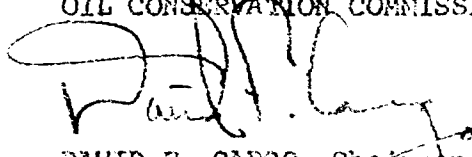
PROVIDED HOWEVER, that the tubing shall be internally plastic-coated; that the casing-tubing annulus shall be filled with a hydrostatically balanced column of inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing.

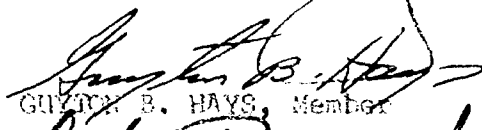
(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.


(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

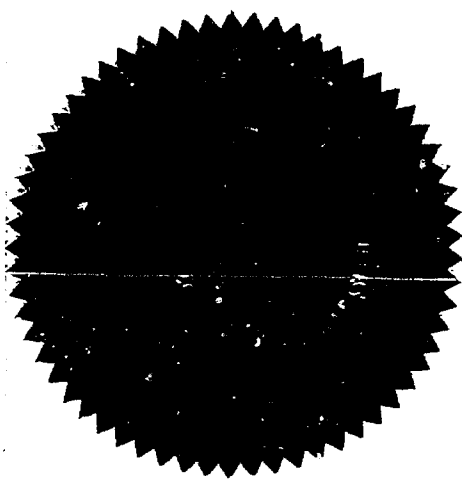
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID P. CARGO, Chairman


GUYTON B. HAYS, Member


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



esr/

- CASE 3737: Application of Southland Royalty Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its O. D. McCoy Well No. 2 at an unorthodox oil well location 800 feet from the South line and 2120 feet from the East line of Section 28, Township 9 South, Range 33 East, Flying "M" San Andres Pool, Lea County, New Mexico.
- CASE 3738: Application of Pan American Petroleum Corporation 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 and Yeso formations in the interval 2190 feet to 3450 feet in its State "CF" SWD Well No. 1 located in Unit I of Section 13, Township 11 South, Range 26 East, Chisum-Devonian Pool, Chaves County, New Mexico.
- CASE 3739: Application of New Mexico Salt Water Disposal Company, 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 Devonian formation in the interval from approximately 13,128 feet to 13,207 feet in its Trainer-Springs Well No. 1, located in Unit H of Section 11, Township 11 South, Range 34 East, Sand Springs-Devonian Pool, Lea County, New Mexico.
- CASE 3740: Application of David Fasken for lease commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to meter the wet gas stream from his Ross-Federal Well No. 1, the Shell-Federal Well No. 1, and the Skelly-Federal Well No. 1, located in Sections 4, 5, and 9 respectively, Township 21 South, Range 24 East, North Indian Hills-Morrow Gas Pool, Eddy County, New Mexico, prior to separation and dehydration, allocating condensate production to each well on the percentage of each well's wet gas stream to the total combined wet gas volume.

DOCKET NO. 9-68

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 20, 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 3724: (Continued from the February 28, 1968, Examiner Hearing)

Application of El Paso Natural Gas Company for a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its San Juan 27-4 Unit Well No. 30 (GD) located in Unit N of Section 32, Township 27 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the Gallup formation and the Basin-Dakota Pool through tubing and the casing-tubing annulus, respectively, by means of a cross-over.

CASE 3733: (Continued from the February 28, 1968, Examiner Hearing)

Application of Daryl Davis to re-enter a well, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter the State "A" Well No. 1 located 1980 feet from the South and West lines of Section 1, Township 4 South, Range 26 East, Chaves County, New Mexico, and attempt to complete said well as a producer from the San Andres formation.

CASE 3578: (Reopened)

Application of Texas Pacific Oil Company for an amendment to Order No. R-3264, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3264 to permit the re-dedication of acreage to its State "A" A/c-2 Wells Nos. 40 and 38, located in Units A and K, respectively, of Section 9, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico. Applicant proposes to dedicate a 320-acre non-standard unit comprising the N/2 of said Section 9 to Well No. 40 and to dedicate a 160-acre non-standard unit comprising the SW/4 of said Section 9 to Well No. 38. It is further proposed that said Order No. R-3264 be amended to require that the effective date of the proration units authorized therein be contingent upon new plats being filed.

CASE 3736: Application of American Trading & Production Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its New Mexico State 26 Well No. 1 located in Unit J of Section 26, Township 20 South, Range 35 East, Lea County, New Mexico, in such a manner as to produce gas from an undesignated Wolfcamp gas pool and oil from an undesignated Devonian oil pool through parallel strings of tubing.

Form O-108
Revised 1-1-65

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

NAME		ADDRESS	
New Mexico Salt Water Disposal Co., Inc.		Box 566, Roswell, New Mexico	
NAME	WELL NO.	FIELD	COUNTY
Trainer-Springs	1	Sand Springs	Lea
LOCATION			
UNIT LETTER	H	WELL IS LOCATED	1980 FEET FROM THE North LINE AND 660 FEET FROM THE East
LINE	11	TOWNSHIP	11S RANGE 34E NMPM.

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13-3/8	332'	275	circ	
INTERMEDIATE	8-5/8	4159'	1000	"	
LONG STRING	5-1/2	13225'	150	not determined	
TUBING	3 ID	13000	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tubing Anchor		
NAME OF PROPOSED INJECTION FORMATION			TOP OF FORMATION	BOTTOM OF FORMATION	
Devonian			13126'	13225 TD	
INJECTION THROUGH TUBING, CASING, OR ANNULUS?		PERFORATIONS OR OPEN HOLE?	PROPOSED INTERVAL(S) OF INJECTION		
Tubing		Perforations	13128-36; 50-54; 60-64; 74-6; 80-2; *		
IS THIS A NEW WELL DRILLED FOR DISPOSAL?		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?	
No		Devonian producer		No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA	
100' + or -		None		None	
ANTICIPATED DAILY INJECTION VOLUME (BLS.)	MINIMUM	MAXIMUM	OPEN OR CLOSED TYPE SYSTEM	IS INJECTION TO BE BY GRAVITY OR PRESSURE?	APPROX. PRESSURE (PSI)
0		10,000	Closed	Gravity	
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -			WATER TO BE DISPOSED OF	NATURAL WATER IN DISPOSAL ZONE	ARE WATER ANALYSES ATTACHED?
			Yes	Yes	No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)					
State of New Mexico					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
Ashmun & Hilliard (See waiver attached)					
Sinclair Oil & Gas Company, P. O. Box 1470, Midland, Texas 79701					
Bridwell Oil Company, Drawer 1830, Wichita Falls, Texas					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?					
SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL		THE NEW MEXICO STATE ENGINEER	
Yes		Yes		No	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		ELECTRICAL LOG		DIAGRAMMATIC SKETCH OF WELL	
Yes		Yes		Yes	

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

*93-97;205-7 Total 26'

John P. Hilliard (Signature) President February 27, 1968 (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.

C. W. TRAINER

PHONE 803 - 291-4100

P. O. BOX 1100

ROOSE, NEW MEXICO 86240

February 9, 1968

Ashmun & Hilliard
710 Vaughn Building
Midland, Texas

Re: Use of my Springs #1 for Water
Disposal Well - SE/4 NE/4
Sec. 11-11S-34E
Lea County, New Mexico

Gentlemen:

I may have a chance to sell captioned well for a water disposal well provided you will not protest this use.

Please indicate your reaction below and return one copy of this letter to me.

Yours very truly,

C. W. Trainer

C. W. Trainer

By S.P.

We will not protest this application if it is made in the next 6 months.

ASHMUN & HILLIARD

By: *J. B. Taylor*

Feb. 12, 1968
Date

We will not give this waiver at this time.

ASHMUN & HILLIARD

By: _____

Date

Sec. _____ Township 11S, Range 34E, Lea _____ County, _____

FORM 103--8 INCH SECTION PLAT In stock and for sale by Gass Printing Co., Tulsa, Okla.

	2		1
		Sinclair	
	Bridwell	Ø (Abandoned Devonian Well)	
	11	12	
	Sinclair	Sinclair	
	Ashmun & Hilliard No. 1 State		
	1/2 - mile	Trainer Springs No. 1 (Proposed Devonian Disposal Well)	
	Sinclair	Open	

REMARKS: _____

DIAGRAMMATIC SKETCH OF PROPOSED SALT WATER DISPOSAL WELL
 Abandoned Devonian Producer Sand Springs
 Trainer No. 1 Springs

Surface Elevation 4145 GL

13-3/8 casing set 332'
 cement circ.

8-5/8 casing set 4159'
 cement circ.

3-inch plastic lined
 tubing -13000' on
 Baker anchor

Top of Devonian, 13126'
 Perforations, 4 per foot
 13128-36; 50-54; 60-64; 74-6;
 80-2; 93-7; 13205-7. -total 26'

5-1/2 casing set TD,
 13225 with 150 sx.

TD 13225'

SCHLEIBERGER

WELL KELCE STATE
COMPANY HELBING AND
PODPECHAN

Other Surveys
SGR, LL

Location of Well

1980' FROM N/L
660' FROM E/L

LOCATION SEC. 11-11S-34E

COUNTY LEA
STATE NEW MEXICO

Elevation: D.F. $\frac{4173.5}{4155}$
X.B. $\frac{4155}{4145}$
or G.L. $\frac{4145}{4145}$

depths Measured From KB 20 Ft. above GL

No.	ONE
ading	1-14-62
ading	13201
asured	9800
Reached	3401
Driller	13202
ol.	13200
Visc.	STARCH GEL 0.1
esist.	9.0 50
es. BHT	142 @ 57
	059 @ 170
	6.5
ir. loss	24 CC 30 m
ad. (H)	0.61 71
re (H)	23 71

Corrected Copy

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

[illegible]

SECRET

RESISTIVITY
ohms. m²/mRESISTIVITY
ohms. m²/m

DEPTHS

MICROCALIPER

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

February 28, 1968

C
O
P
Y

Mr. Charles C. Loveless, Jr., President
New Mexico Salt Water Disposal Company, Inc. DOCKET MAILED
Post Office Box 566
Roswell, New Mexico 88201

Date 3-7-68

Dear Mr. Loveless:

Your application for salt water disposal, dated February 27, 1968, is not eligible for administrative approval. Your application is being docketed for the March 20th examiner hearing.

Very truly yours,

J. E. KAPTEINA
Petroleum Engineer

JEK/ir

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-4491 • ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 20, 1968
EXAMINER HEARING

IN THE MATTER OF :

Application of New Mexico Salt Water
Disposal Company, Inc., for salt water
disposal, Lea County, New Mexico.

Case 3739

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Next will be Case 3739.

MR. HATCH: Case 3739. Application of New Mexico Salt Water Disposal Company, Inc., for salt water disposal, Lea County, New Mexico.

MR. BUELL: Mr. Examiner, Sumner Buell appearing on behalf of Salt Water Disposal Company. We will have one witness, Mr. LeMay.

(Witness sworn)

(Whereupon, Applicant's
Exhibits 1 through 4
marked for identification)

MR. BUELL: Mr. Examiner, Mr. Lovelace with the New Mexico Salt Water Disposal Company was going to present this case himself and, as the Examiner knows, Mr. Lovelace was unable to leave Roswell because of the weather this morning and Mr. LeMay, whose qualifications will be brought out, will testify as Mr. Lovelace's expert witness in this matter.

WILLIAM J. LeMAY

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

DIRECT EXAMINATION

BY MR. BUELL:

Q Would you state your name, please?

A William J. LeMay.

Q By whom are you employed and in what capacity?

A I am a partner in the Petroleum Consulting Firm of LeMay and Stevens. I am a Consulting Geologist.

Q Where is that located?

A In Santa Fe, New Mexico.

Q Have you previously testified before the Commission or one of its Examiners?

A Yes, I have.

Q Were your qualifications accepted?

A Yes.

Q Are you familiar with what is sought by the application in this case?

A Yes, I am.

Q Are you familiar with the area with which the application deals?

A Yes.

Q Would you briefly describe for the Examiner what is sought in this case?

A Well the Applicant seeks authority to dispose of produced salt water into the Devonian Formation in the interval from approximately 13,128 feet to 13,207 feet in its Trainer-Springs Well No. 1 which is located in Unit H

of Section 11, Township 11 South, Range 34 East which is in the Sand Springs-Devonian Field in Lea County New Mexico.

Q Mr. LeMay, referring you to what has been marked as Applicant's Exhibit No. 1, would you briefly describe what this exhibit shows?

A Exhibit 1 shows the location of the proposed salt water disposal well in Section 11 in relationship to other wells in the Sand Springs Field. The Trainer-Springs well was the previous producer of oil from the Devonian Formation in the Sand Springs Field and it's currently abandoned and it shows the relationship of this well to other wells in the field.

Q Referring you to what has been marked as Exhibit 2 would you describe what that exhibit represents?

A Exhibit No. 2 is a structure map of a portion of the northern part of Lea County, showing the Sand Springs Field and the structure map is drawn on top of the Devonian Formation which is the producing formation in both the Sand Springs Field and the Four Lakes Field to the south. The large circle around the Mobil Well in Section 10, which does not show on Exhibit 1, was a previous application in which the applicant sought to inject salt water into that well, which was approved by the Commission. It's a large

circle on the structure map.

Q That Mobil No. 1 State GG Well which you referred to in Section 10, this is a disposal well to the Devonian Formation?

A Correct.

Q Referring you now to what has been marked as Exhibit No. 3, would you explain what this exhibit shows?

A Exhibit No. 3 is a microlateral log, a copy of the Helbing and Podpechan No. 1 which is the Trainer Well in question. That was sold from Helbing-Podpechan to Trainer and in turn to Mr. Lovelace who is the applicant in the case and it shows the Devonian Formation, the permeability of the Devonian Formation, the top of the Devonian on the exhibit is at 13,126. The perforations are noted on the exhibit and the main purpose of the exhibit is to show the permeability within the Devonian Formation, the capacity of this formation to produce or absorb fluids.

Q What does this show in the way of permeability?

A It shows that it is an excellent reservoir with good permeability.

Q Referring you now to what has been marked as Exhibit No. 4, would you explain this, please?

A Yes, Exhibit No. 4 is a schematic diagram of the proposed salt water disposal well. It was an abandoned Devonian producer. It shows the elevation of 4,145 feet ground level; the casing program which is currently in the hole which consists of thirteen and three-eighths inch casing set at 332 feet with the cement circulated to the surface. The intermediate string of eight and five eighths inch casing set at 4,159 feet which is into the San Andres. This string was circulated and the production, the five and a half inch casing which was set at total depth of 13,225 feet with 150 sacks. It also indicates the top of the Devonian which is 13,126 feet and the perforated interval and the proposed three inch plastic lined tubing which would be hung on a Baker anchor at approximately 13,000 feet.

Q Do you have any knowledge of the approximate top of the cement that was circulated out of the five and a half inch casing?

A It would be an estimate. I would assume it would be approximately 13,000 feet.

Q Mr. LeMay, where will the source of the fluids be from the proposed -- to be injected into this well?

A The water that was proposed to be injected in the

well would come from the Vada Field to the north and northwest, north approximately six to eight miles and from the Simanola Field which also produces from the Bough C, located approximately five miles north.

Q Has there been in this area previous injection of fluids from this source into the Devonian Formation?

A Yes, there has. The Mobil No. 1 State GG is now taking Bough C oil from the Inbe-South Lane which is Bough C production approximately six miles northwest of that well.

Q Has there been any experience with rejection or incompatibility of these waters?

A No, there has not. The application was granted in the Fall of last year and they are currently injecting approximately 7,000 barrels of water per day into the Devonian of the Mobil State GG and have found nothing in the way of incompatibility between the waters of the Bough C and the Devonian waters of that well.

Q How much water does the Applicant propose to inject into this subject well?

A At the present time he proposes to inject approximately 10,000 barrels of water per day.

Q Will that be under pressure or will it be injected on a vacuum?

A No, it will be injected on a vacuum. Again the Mobil State GG is accepting all the water on a vacuum and the fluid level is 1,704 feet from the surface and the well could take more water.

Q Is there any planned program for acidizing or treating this well over a period of time while injection is taking place?

A Yes, there is. The Applicant proposes first to acidize the top of the Devonian with approximately 3,000 gallons of acid and then he has an arrangement with Western Company whereby Western Company will inject 500 gallons of acid every sixty days, fifteen per cent HCL with inhibitors into the proposed injection well.

Q Mr. LeMay, in your opinion, would the granting of this application prevent waste and protect correlative rights?

A In my opinion, it would.

Q Referring you again to Exhibits 1 and 2 and 3, do these exhibits accurately reflect those things which are shown thereon?

A Yes, they do.

Q To your independent knowledge?

A Yes, they do and I do agree with them.

Q And referring you to what has been marked as Exhibit 4, have you conferred with the Applicant in this case and are you satisfied that this satisfactorily represents the proposed downhole completion of the Trainer No. 1 Well in the Sand Springs area?

A Yes.

MR. BUELL: At this time I would move that Exhibits 1 through 4 be admitted into evidence.

MR. NUTTER: Applicant's Exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 4 were offered and admitted in evidence.)

MR. BUELL: Mr. Examiner, I believe the Case File in this matter will show that there is a letter from Ashman and Hilliard who are the owners of the well west of the subject well in Section 11 where they have waived any protest of the application in this case.

MR. NUTTER: There is a letter attached to the original application. I think that we might just read this note into the record. The letter was sent by C.W. Trainer, who was the operator of the subject well to Ashman and Hilliard's office in Midland, Texas and reads as follows:
"I may have a chance to sell the captioned well for a water

disposal well provided you will not protest this use.

Please indicate your reaction below and return one copy of this letter to me." Signed Trainer. Ashman and Hilliard signed the following statement at the bottom of the letter and returned it to Mr. Trainer. "We will not protest this application if it is made in the next six months, Ashman and Hilliard by J.B. Taylor, dated February 12, 1968.

MR. BUELL: Thank you, sir, I have nothing further.

CROSS EXAMINATION

BY MR. NUTTER:

Q I note from your structure map, Exhibit 2, that the Ashman and Hilliard Well has a Devonian top at 8942 and that the subject well has a Devonian top at minus 8960.

A That is correct.

Q Do you have any idea what the perforated interval on the Ashman and Hilliard well is or if it's open hole or just what?

A I have the perforated interval here, sir.

The Ashman and Hilliard well was completed open hole on a natural completion without acidizing from 13,129 to 13,140. The top of the Devonian in that well is 13,095.

Q We've got a top there of 13,095; we've got a top in the subject well at 1,126, I believe. The Ashman and Hilliard

well has casing set at 129; the subject well has casing set at 225, is that correct?

A The Ashman-Hilliard well which was initially completed as Hill and Meeker No. 1 State 11 and subsequently sold to Ashman-Hilliard.

Q But it's open hole.

A It's an open hole completion, correct, with the top of the five and a half inch at 13,129.

Q And its total depth is 140?

A Correct.

Q So it has eleven feet of open hole completion?

A Correct.

Q Then this well, the top of the Devonian is 126 and the casing is set at TD 13,225 and perforated up to 13,128 so evidently although there is a difference in the top of the Devonian the injection interval here or the top of the injection interval here is comparable with the top of the producing interval in the other well, is that correct?

A With the existing perforations, yes.

Q Do you have any opinion as to whether injection of water into this subject well will have any dilatorius effect on the producing well that's operated by Ashman and Hilliard?

A I could say it would probably work the other way in the sense you would be giving a partial water drive to the Ashman-Hilliard well.

Q And the Devonian is a water drive producing mechanism?

A Yes.

Q And you would be augmenting the natural water drive?

A Yes, it has been a water drive mechanism throughout Lea County. The bottom hole pressures which have not been taken in the field, but the little pressure information I was able to gather does show a rather stable bottom hole pressure. I could read this into the record. The Trainer well was completed in January of 1962 with a thirty minute final shut-in pressure of 4965. I don't have the total amount of fluid removed from the reservoir between that time and the time that Hill and Meeker or Ashman and Hilliard completed their well in February of 1964 but it was a large amount of fluid because of the excess amount of water being produced. The final bottom pressure in that well was 4895 which is 70 pounds or the margin of error would exceed the drawdown indicated by the pressure, I think it was gas solution. You would notice a much stronger decline in

pressure with that amount of fluid removed.

Q I would be inclined to agree. What was the shut-in bottom hole pressure on your drillstem test on the Trainer 1?

A Trainer well was 4965.

Q And the other was 4895?

A Correct.

MR. NUTTER: Are there any other questions of the witness? You may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Buell?

MR. BUELL: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 3739? We will take the case under advisement.

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, KAY EMBREE, Notary Public 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.

Witness my Hand and Seal this 29th day of March, 1968.

Kay Embree
 NOTARY PUBLIC

My Commission Expires:

November 19, 1968

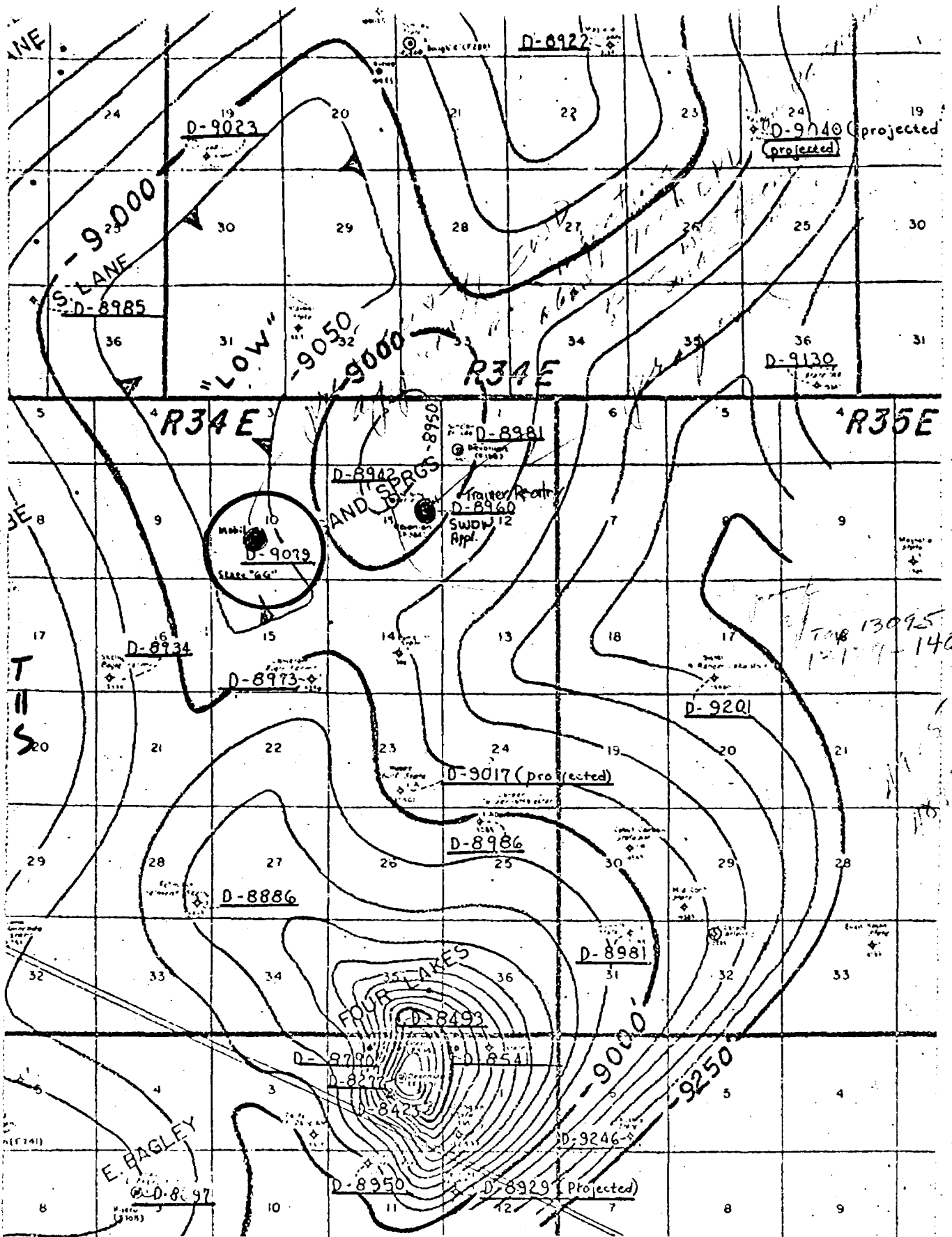
I hereby certify that the foregoing
 is a true and correct copy of the
 original of the same as the same was
 filed in my office on 3/20/68 3739
Abraham, Notary Public
 New Mexico Oil Conservation Commission

Sec. _____ Township 11S, Range 34E, Lea _____ County, _____

FORM 103-8 INCH SECTION PLAT In stock and for sale by Goss Printing Co., Tulsa, Okla.

	2	<div data-bbox="950 455 1522 716">BEFORE EXAMINER NUTTER CONSERVATION COMMISSION <i>Opalik</i> EXHIBIT NO. <u>1</u> CASE NO. <u>2737</u></div>	
		Sinclair	
	Bridwell	Ø (Abandoned Devonian Well)	
	Sinclair 11	Sinclair 12	
	Ashmun & Hilliard No. 1 State		
	1/2 - mile →	Trainer Springs No. 1 (Proposed Devonian Disposal Well)	
	Sinclair	Open	

REMARKS: _____



DEVONIAN STRUCTURE MAP
 Proposed Salt Water Disposal Well
 Sec. 10 - T11S - R34E
 Lea County, New Mexico

CONICUTED DESIGN Devonian
 CONTOUR INTERVAL 50'
 SCALE 1" = 1 mile
 GEOLOGIST E. K. David
 DATE 9-11-67

BEFORE EXAMINER NUTTER
 OFFICE OF CONSERVATION
 EXHIBIT NO. 4727
 CASE NO. 4727

MICROLATEROLOG

COMPANY HELBING AND
POOPECHAN

COMPANY HELBING AND
POOPECHAN

WELL KELCE STATE # 1
Now designated the Trainer
No. 1 Springs
(Sand Springs)
UNDESIGNATED

LOCATION SEC. 11-11S-34E

COUNTY LEA
STATE NEW MEXICO

Measured from KE 20 Ft. above GL

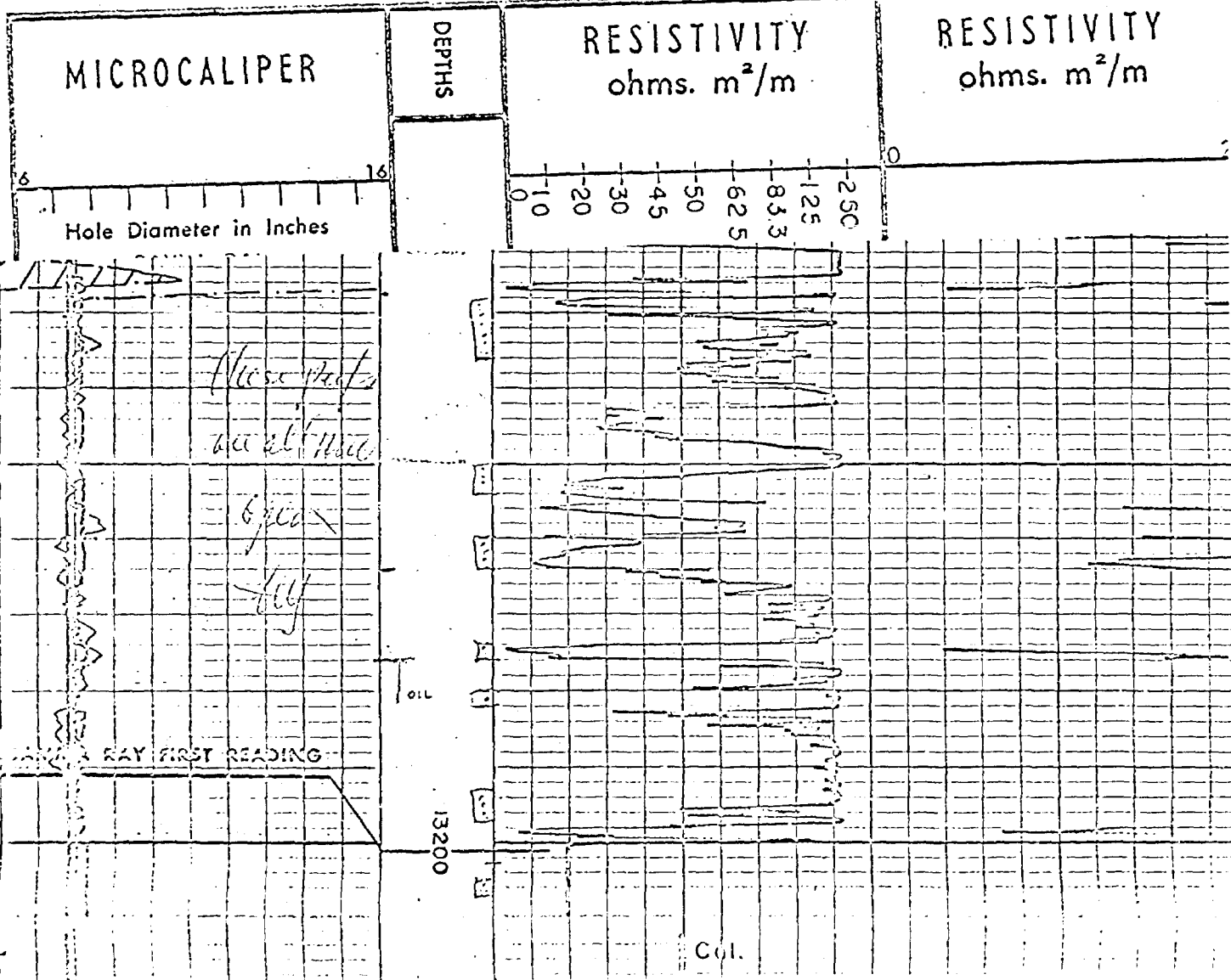
Other Surveys
SGR, LL

Location of Well
1980' FROM N/L
660' FROM E/L

Elevation: D.F. 4173.5
K.B. 4165
or G.L. 4115

Connected Log

REMARKS



DIAGRAMMATIC SKETCH OF PROPOSED SALT WATER DISPOSAL WELL
Abandoned Devonian Producer Sand Springs
Trainer No. 1 Springs

Surface Elevation 4145 GL

13-3/8 casing set 332'
cement circ..

8-5/8 casing set 4159'
cement circ..

3-inch plastic lined
tubing -13000' on
Baker anchor

5-1/2 casing set TD,
13225 with 150 sx.

Top of Devonian, 13126'
Perforations, 4 per foot
13128-36; 50-54; 60-64; 74-6;
80-2; 93-7; 13205-7: -total 26'

TD 13225'

BEFORE EXAMINED NITR
OIL CONSERVATION
EXHIBIT NO. 4
CASE NO. 3739

disposed
w/ will come from
to the north
about 10,000 ft

will be
with 3000
1000
1000