

CASE 3953: Application of B. J.
GRAHAM FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

Case Number

3953

Application

Transcripts.

Small Exhibits

ETC.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 20, 1968

IN THE MATTER OF:

Application of B. J. Graham
for salt water disposal,
Lea County, New Mexico

Case No. 3953

BEFORE: ELVIS A. UTZ

TRANSCRIPT OF HEARING

MR. UTZ: Case 3953.

MR. HATCH: Application of B. J. Graham for salt water disposal, Lea County, New Mexico.

MR. HATCH: Are you Mr. Graham?

MR. GRAHAM: Yes, sir.

MR. UTZ: Are there other appearances? You may proceed.

(Witness sworn.)

* * * * *

B. J. GRAHAM, the applicant, having been first duly sworn, testified as follows:

T E S T I M O N Y

MR. GRAHAM: I am Bill Graham appearing for myself, and I would like to use my application that I filed with the exhibits attached to it. The sketch and the contoured map on top of the Seven Rivers. Now this is my first appearance before this Commission. I graduated from Oklahoma A & M in 1951 with a degree in Mechanical Engineering. I'm a Registered Professional Engineer in Texas. I have been practicing as an engineer for 17 years Sohio Petroleum, Creole Petroleum, American Trading, and I have been an individual operator and consultant for the past two years.

(Applicant's Exhibits 1, 2 and 3 marked for identification.)

MR. GRAHAM: I would like to submit a waiver which I requested from Tenneco Oil Company, who is the direct offset operator of this proposed injection well, signed by their District Production Engineer, Mr. Carnes, in Midland. I have three copies of this, I have the original for my own file. If you want the original, I'll be glad to give it to you.

MR. UTZ: A copy will be satisfactory.

MR. GRAHAM: In my application, I was not aware that I needed a plat showing all the operators within a two-mile radius, and I have three copies of the land map for this area with a circle around my well. The plat I did include does include the producers within two miles, but it doesn't have, the whole plat isn't two miles wide each way. I would like to submit this.

MR. HATCH: The waiver will be marked as Exhibit 4 and this weill be marked as Exhibit 5?

MR. GRAHAM: Right.

(Whereupon, Applicant's Exhibits
4 and 5 marked for identification.)

MR. GRAHAM: I have made an agreement with Tenneco Oil Company to dispose of the salt water they produce on their Loomis Lease which is immediately to the west of my Dinnin A No. 2. The Dinnin A No. 2 is a four barrel oil well and

300 barrel water well per day. With the forthcoming No Pit Order, there is no way it can be continued to produce. So I propose to convert it to salt water disposal well in the Seven Rivers Formation which is where it is producing now, and Tenneco's two direct offset wells are both producing from the Seven Rivers Formation. At the present time, they make about 100 barrels of water per day. I anticipate possibly there might be some other operators in this area who would desire to use this well on a commercial basis where I would dispose of their water for them. I have not contacted anybody, nor am I sure that I'll get any more water, but I anticipate that I possibly will.

E X A M I N A T I O N

BY MR. UTZ:

Q That is, you are going to inject Tennessee's?

A Yes, sir, I have an agreement with Tennessee to dispose of their water from their Loomis Lease in my Dinnin A No. 2.

Q Now, Mr. Graham, how much water do you anticipate that you will inject?

A I'm going to set a pump that will have a capacity of 600 barrels per day.

Q That doesn't mean that you are going to inject 600

barrels a day?

A Right, at the present Tenneco's water production is roughly 100 barrels per day.

Q Now, in regard to your Exhibit No. 3, which is your sketch, do you intend to plastic-coat your tubing?

A Yes, sir.

Q And that's what, 2 and 3/8ths tubing?

A Yes, sir, plastic-coat the tubing, I'll fill the annulus with either water treated with potassium chromate or oil, and then put a pressure gauge on the surface. I was not aware of these requirements at the time I made this application.

Q Your production string is what size, 4 and 1/2?

A Four and 1/2-inch casing.

Q Top of the cement 160 feet?

A 160 feet from the surface by temperature survey.

Q The 7-inch surface string is circulated?

A Yes, sir.

Q Now, this injection will be into the Seven Rivers, is that correct?

A Yes, sir.

Q There is other production in the Seven Rivers in this area, is there not?

A The production in the Seven Rivers in this area

on the plat which I attached, the contour atop of the Seven Rivers map, the only production is in the northwest quarter of Section 14, which says "W. H. Black, et al", that has all now been sold to Ambassador, but that is the only Seven Rivers Production. The rest of the production is from the Yates.

Q So you will actually be injecting how many feet below the Yates?

A Well, the Yates is about 3300, so I will be injecting 118 feet below the Yates.

Q What effect do you expect that this injection will have on the Yates production in the area?

A Well, on the Yates, I don't think it will have any, since I will be injecting into the Seven Rivers.

Q You think there's separation between the Yates and Seven Rivers?

A Yes, I think there's effective separation between the Yates and Seven Rivers. I'm surrounded by dry holes, between the Dinnin A No. 2 and the production to the north from the Yates, the Yates is extremely tight in Section 23, these wells were drilled with a rotary to the top of the Yates and then cable tooled and there was very, very slight shows of oil, they were not commercial, indicating a very tight

reservoir in the Yates.

Q The Yates is a solution drive pool?

A Yes, the Seven Rivers is a water drive reservoir.

Q Well, in this area, except in Section 14, you have no Seven Rivers production?

A That's right.

Q But there is a water table in the Seven Rivers?

A Yes, sir. This is Federal Land and I'm having the same problems with, what was it that fellow called it?

Q Slup?

A Yes, slup. I have sent them my \$10.00 and reams and reams of paper and they said if I could get approval from you that they would approve it. It's kind of like the chicken and the egg, I think.

Q I presume we're the egg.

MR. UTZ: Are there any questions of the witness?

I believe you did state on the record that you are representing yourself --

A THE WITNESS: Yes, sir.

MR. UTZ: -- in this case; and you are not a corporation?

THE WITNESS: No, sir, I'm an individual, I own this well, individually.

MR. UTZ: Without objection, Applicant's Exhibits

1 through 5 will be admitted and entered into the record of this case.

(Whereupon, Applicant's Exhibits
1 through 5 admitted in evidence.)

MR. UTZ: You may be excused. The case will be taken under advisement.

(Witness excused.)

I N D E X

WITNESS		PAGE
<u>B. J. GRAHAM</u>		
Direct Testimony		2
Examination by Mr. Utz		4
<u>EXHIBITS</u>	<u>MARKED</u>	<u>ADMITTED</u>
Applicant's 1,2,3	2	8
Applicant's 4,5	3	8

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

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

Ada Dearnley
 ADA DEARNLEY

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3953 heard by me on 11-20-68. 19.....
[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

November 26, 1968

Mr. B. J. Graham
Post Office Box 5321
Midland, Texas 79701

Re: Case No. 3953
Order No. R-3595
Applicant:
B. J. Graham

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

Bureau of Land Management

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. 3953
Order No. R-3595

APPLICATION OF B. J. GRAHAM
FOR SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 8:30 a.m. on November 20, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 26th day of November, 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, B. J. Graham, is the owner and operator of the Bernice Dinnin A Well No. 2, located in Unit J of Section 23, Township 20 South, Range 33 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Seven Rivers formation, with injection into the open-hole interval from approximately 3418 feet to 3429 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3350 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

-2-

CASE No. 3953
Order No. R-3595

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:

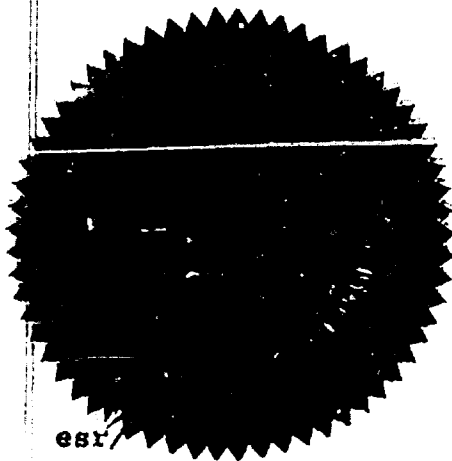
(1) That the applicant, B. J. Graham, is hereby authorized to utilize his Bernice Dinnin A Well No. 2, located in Unit J of Section 23, Township 20 South, Range 33 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3350 feet, with injection into the open-hole interval from approximately 3418 feet to 3429 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
DAVID F. CARGO, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

3953

Heard 11-20-68

Rec. 11-20-68

Grant. B. J. Graham permission to
convert his Bernice Dennis A' #2
J. 23-205-336. Deena S.R. Pool. Injection
to be into Deena River open hole
3418-3429 thru 2 3/4" internally plastered
coated tubing and under a packer
set at approx. 3300. Annulus shall
be filled with cement fluid w/
pressure gauge at surface.

Injection is in S.R. water table.
~~water~~ No S.R. production within
1 1/2 mi. of injection & a 60'
separation between Prod &
injection wells.

Thos. H. Int.

Lease 6015 ARC Federal Well No. 1 located in Unit O of Section 9, Township 20 South, Range 33 East, West Teas Pool, Lea County, New Mexico.

CASE 3949: Application of Phillips Petroleum 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 Lower Wolfcamp and Upper Pennsylvanian formations in the open-hole interval from approximately 9580 feet to 10,400 feet in its Pello "A" Well No. 1, located in Unit L of Section 2, Township 15 South, Range 32 East, Tulk-Wolfcamp Pool, Lea County, New Mexico.

CASE 3950: Application of Agua, Inc., for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres and such other formations as may be present in the perforated interval from approximately 4148 feet to 4388 feet in its Chaveroo SWD Well No. C-30 (formerly the Humble Oil & Refining Company Federal Andrews Well No. 1) located in the NE/4 NW/4 of Section 30, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 3951: Application of Marathon Oil Company for salt water disposal, Roosevelt 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 4163 feet to 4460 feet in its Marathon State Well No. 1 located in Unit G of Section 36, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 3952: 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 Seven Rivers formation in the open-hole interval from approximately 3415 feet to 3492 feet in his Everett Well No. 2 located 660 feet from the South line and 1980 feet from the West line of Section 35, Township 24 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 3953: Application of B. J. Graham for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately

- CASE 3953 continued: 3418 feet to 3429 feet in the Bernice Dinnin A Well No. 2 located in Unit J of Section 23, Township 20 South, Range 33 East, Teas Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 3954: Application of C. E. Long, Jr., for a non-standard gas proration unit and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the S/2 SW/4 of Section 32, Township 21 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to his Shell-State Well No. 1 at an unorthodox location for said pool 660 feet from the South line and 2310 feet from the West line of said Section 32.
- CASE 3955: Application of Yates Drilling Company for salt water disposal, Roosevelt 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 approximately 9640 feet to 9660 feet in its Lillie M. Yates Well No. 4 located in Unit D of Section 31, Township 8 South, Range 37 East, Allison Pennsylvanian Pool, Roosevelt County, New Mexico.
- CASE 3956: Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 4411 feet to 4464 feet in its Federal AK Well No. 1 located in Unit I of Section 3, Township 19 South, Range 25 East, Penasco-Wolfcamp Pool, Eddy County, New Mexico.
- CASE 3957: Application of Yates Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the interval from approximately 1260 feet to 1410 feet in its A. V. Gissler Well No. 2 located in Unit B of Section 23, Township 17 South, Range 25 East, Eagle Creek-San Andres Pool, Eddy County, New Mexico.
- CASE 3958: Application of Yates Petroleum Corporation for a dual completion and salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete three wells in Section 8, Township 19 South, Range 25 East, and Section 25, Township 18 South, Range 25 East, Penasco Draw-San Andres Yeso Pool, Eddy County, New Mexico, in such a manner as to permit the production of oil from the San Andres formation and the disposal of produced salt water

Case 3983

Form C-108
Revised 1-1-55

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

OPERATOR B. J. GIBBONS		ADDRESS P. O. Box 3331, Midland, Texas	
LEASE NAME Bernice Blain	WELL NO. 2	FIELD Loam	COUNTY Lee
LOCATION UNIT LETTER J ; WELL IS LOCATED 19.4 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE, SECTION 23 TOWNSHIP 10N RANGE 33E NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	7"	1539	240	Surface	Circulated
INTERMEDIATE	4"	3418	250	160'	Temp. Survey
LONG STRING					
TUBING	2"	3350	NAME, MODEL AND DEPTH OF TUBING PACKER Guiberson Tension 3350		
NAME OF PROPOSED INJECTION FORMATION Lower Rivers			TOP OF FORMATION 3416	BOTTOM OF FORMATION 3429	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? 0. 11.		PROPOSED INTERVAL(S) OF INJECTION 3418-3429	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil Producer		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH None					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 3300		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.)	MINIMUM 50	MAXIMUM 400	OPEN OR CLOSED TYPE SYSTEM Open	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 400
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 Yes	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Federal Land					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Tenneco Oil Company P.O. Box 1031, Midland Texas					
Note-This well is low in the reservoir and produces 90% water. Injection of water will aid in recovery of oil in the up dip wells.					
<div style="border: 1px solid black; padding: 5px; float: right;"> BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL EXHIBIT NO. 295 CASE NO. 3983 DATE 11-7-68 </div>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER Yes		THE NEW MEXICO STATE ENGINEER Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		PLAT OF AREA Yes		GRAPHIC SKETCH OF WELL Yes	

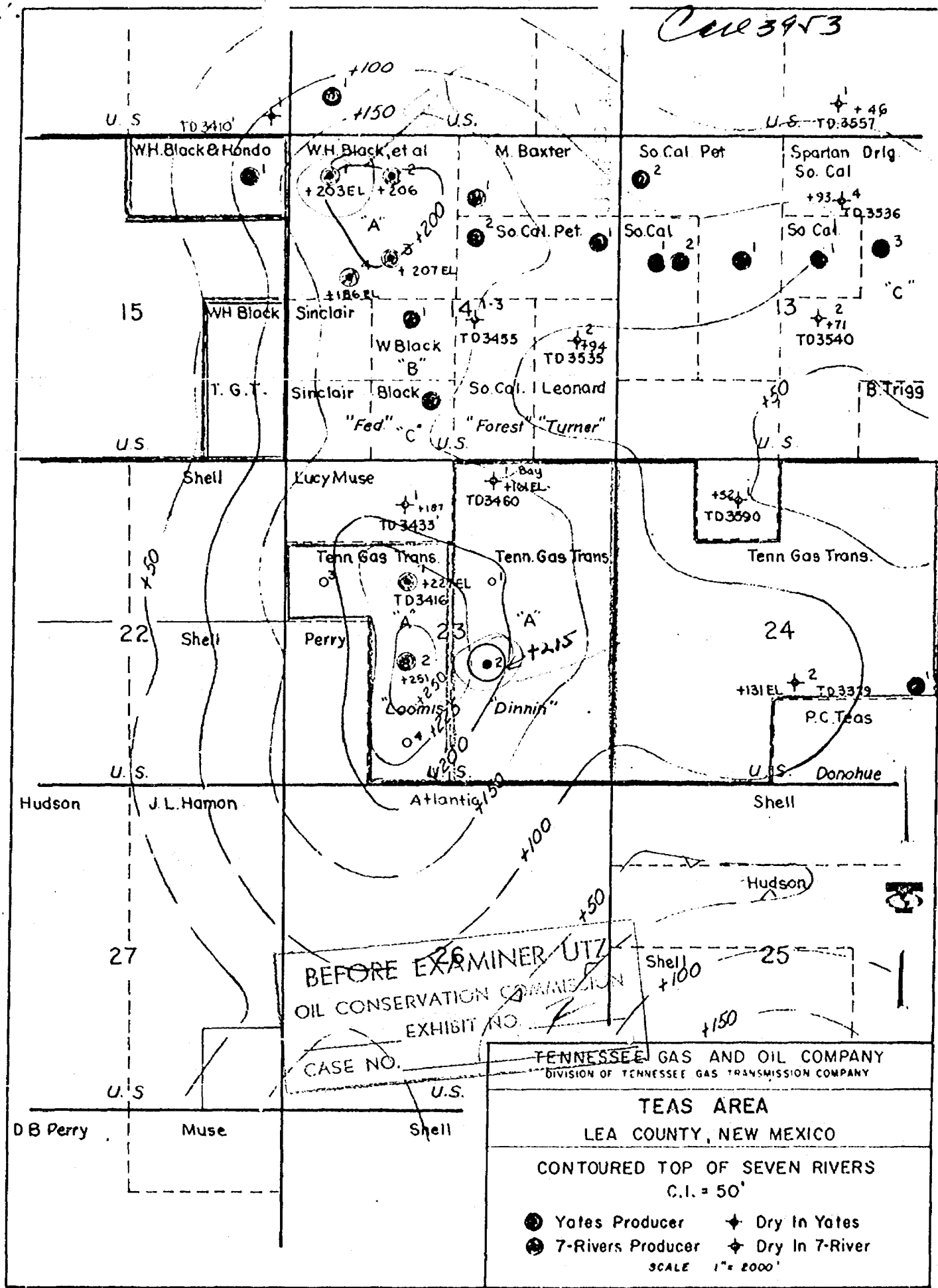
I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Bill J. Graham (Signature) **Owner** (Title) **Oct 21, 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.

Date **11-7-68**

Cell 3953



Case
3953

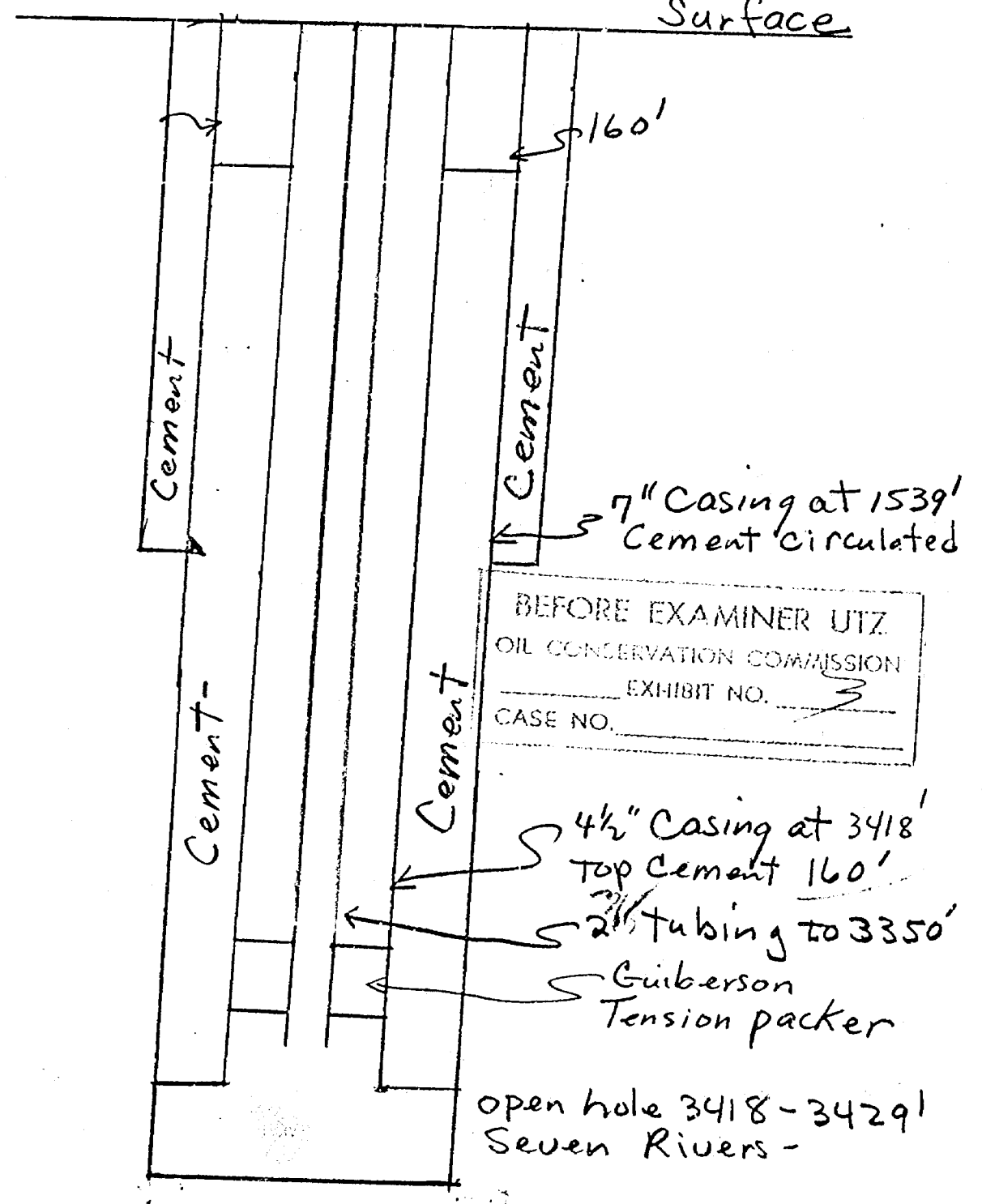
BILL J. GRAHAM
CONSULTING PETROLEUM ENGINEER - OIL OPERATOR

202 WEST BUILDING
P. O. BOX 5321

MUTUAL 4-6872
AREA CODE 915

MIDLAND, TEXAS
79701

Diagrammatic sketch of Bernice Dinnin A#2
Surface



BILL J. GRAHAM
CONSULTING PETROLEUM ENGINEER - OIL OPERATOR

202 WEST BUILDING
P. O. BOX 5321

MUTUAL 4-6872
AREA CODE 915

MIDLAND, TEXAS
79701

File
Dinnin A

October 18, 1968

Tenneco Oil Company
P. O. Box 1031
Midland, Texas 79701

United States Bureau of Land Management
P. O. Drawer 1857
Roswell, New Mexico

Gentlemen:

Attached is one copy of an application to dispose of salt water into the Seven Rivers formation in the B. J. Graham, Bernice Dinnin A, Well #2. (1980' FSL E 1980' FEL, Sec. 23, T 20 S, R 33 E, Lea County, New Mexico.

If you have no objections to this well being used for salt water disposal, please sign below and return one copy to the above address.

Very truly yours,

Bill J. Graham
Bill J. Graham

J. J. Carnes - Dist. Prod. Engr.
Tenneco Oil Company

U. S. Bureau of Land Management

BJG/kb
Enclosure

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
app. EXHIBIT NO. *4*
CASE NO. *3953*



20 PH 1 0
MAIN OFFICE 000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DIVISION OF LANDS & MINERALS
PROGRAM MANAGEMENT & LAND OFFICE
P. O. Box 1449
Santa Fe, New Mexico 87501

IN REPLY REFER TO:

NM 8274 (4.20e)
SLUP Application

November 18, 1968

Mr. Bill J. Graham
P. O. Box 5321
Midland, Texas 79701

Dear Mr. Graham:

Your application to utilize the following-described lands for salt water disposal purposes has been assigned serial New Mexico 8274:

T. 20 S., R. 33 E., N. Mex. Prin. Mer., New Mexico
Sec. 23, ~~S1/4NW1/4SE1/4~~, ~~N1/4NW1/4SE1/4~~

It will be necessary that you furnish a copy of the approval from the Oil Conservation Commission of New Mexico, authorizing your disposal operations. The application will be processed when this evidence is received.

Sincerely yours,

/s/ Harold A. Berends

Chief, Branch of Lands

cc: Oil Conservation Commission of New Mexico ✓
P. O. Box 2088
Santa Fe, New Mexico 87501
Attention: Mr. Daniel S. Nutter

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

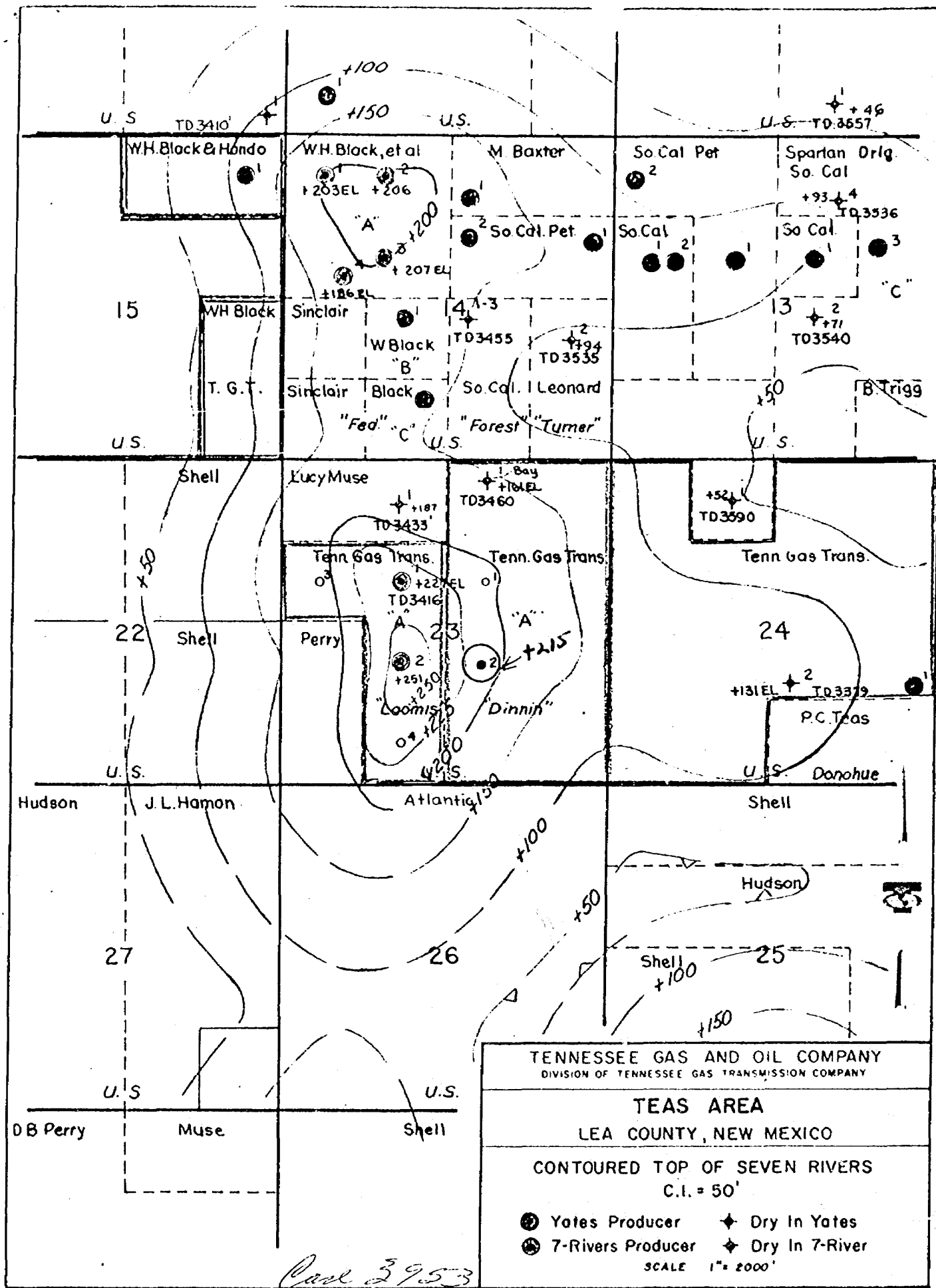
OPERATOR B. J. Graham		ADDRESS O. Box 5321, Midland, Texas			
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TUBING	2"	3350	NAME, MODEL AND DEPTH OF TUBING PACKER 3350 Guiberson Tension		
NAME OF PROPOSED INJECTION FORMATION Seven Rivers		TOP OF FORMATION 3416		BOTTOM OF FORMATION 3429	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? PROPOSED INTERVAL(S) OF INJECTION O. H. 3418-3429			
IS THIS A NEW WELL DRILLED FOR DISPOSAL? NO		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil Producer		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH None					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 3300		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM 50	MAXIMUM 400	OPEN OR CLOSED TYPE SYSTEM Open	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 400
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 Yes	NATURAL WATER IN DISPOSAL ZONE Yes	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Federal Land					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Tenneco Oil Company P.O. Box 1031, Midland Texas					
Note-This well is low in the reservoir and produces 90% water. Injection of water will aid in recovery of oil in the up dip wells.					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				THE NEW MEXICO STATE ENGINEER Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

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

B. J. Graham **Owner** **Oct. 21, 1968**
(Signature) (Title) (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.

Case 2953



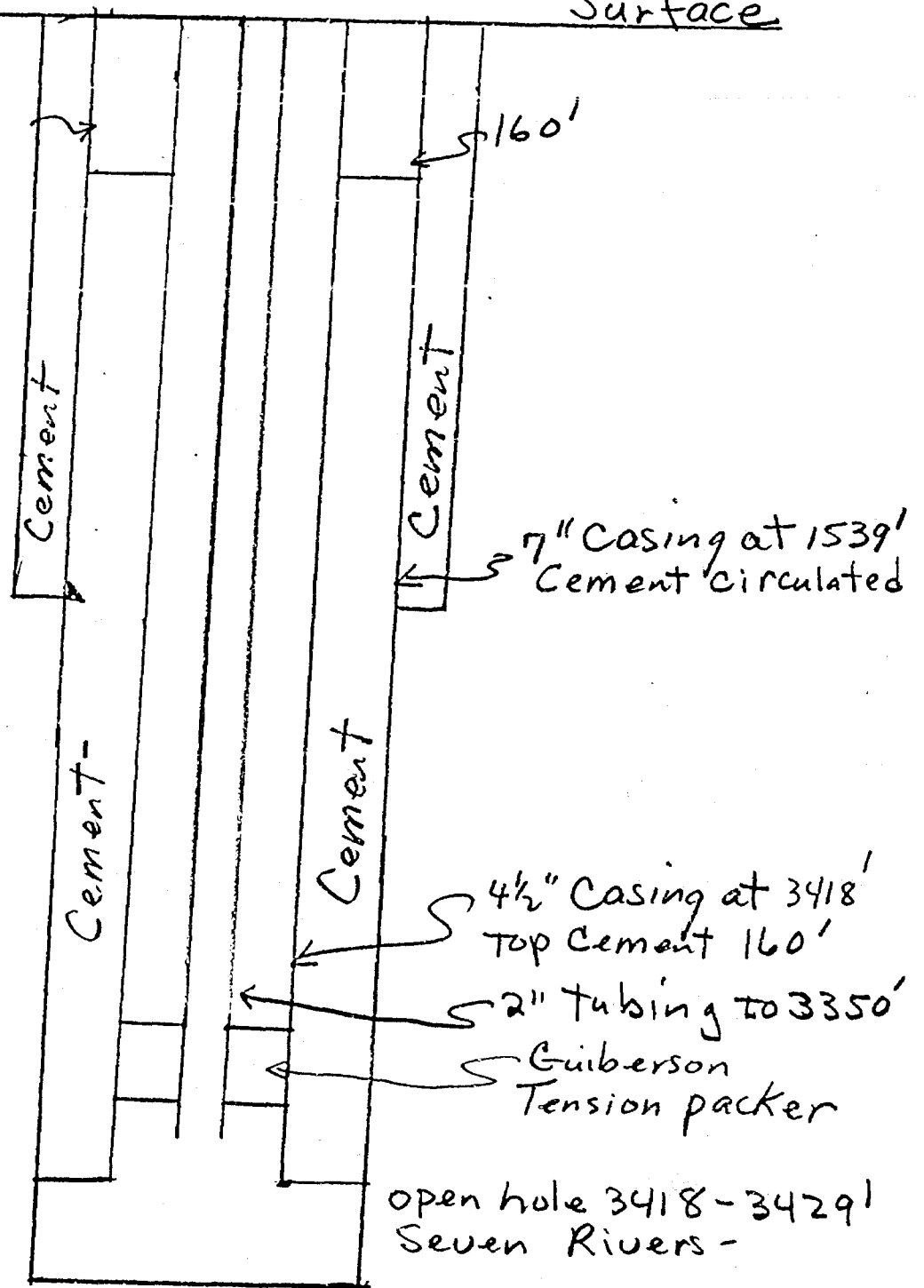
BILL J. GRAHAM
CONSULTING PETROLEUM ENGINEER - OIL OPERATOR

202 WEST BUILDING
P. O. BOX 5321

MUTUAL 4-6872
AREA CODE 915

MIDLAND, TEXAS
79701

Diagrammatic sketch of Bernice Dinnin A#2
Surface



Case 395-3

BILL J. GRAHAM
CONSULTING PETROLEUM ENGINEER - OIL OPERATOR

202 WEST BUILDING
P. O. BOX 5321

MUTUAL 4-6872
AREA CODE 915

MIDLAND, TEXAS
79701

October 18, 1968

Tenneco Oil Company
P. O. Box 1031
Midland, Texas 79701

United States Bureau of Land Management
P. O. Drawer 1857
Roswell, New Mexico

Gentlemen:

Attached is one copy of an application to dispose of salt water into the Seven Rivers formation in the B. J. Graham, Bernice Dinnin A, Well #2. (1980' FSL E 1980' FEL, Sec. 23, T 20 S, R 33 E, Lea County, New Mexico.

If you have no objections to this well being used for salt water disposal, please sign below and return one copy to the above address.

Very truly yours,

Bill J. Graham
Bill J. Graham

Tenneco Oil Company

U. S. Bureau of Land Management

BJG/kb
Enclosure

Case 3953

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:

*Send copy of
order to
US BLM*

CASE No. 3953

Order No. R- 3575

APPLICATION OF B. J. GRAHAM
FOR SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 8:30 a.m. on November 20 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of November, 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, B. J. Graham,
is the owner and operator of the Bernice Dinnin A Well No. 2,
located in Unit J of Section 23, Township 20 South, Range
33 East, NMPM, Teas Yates-Seven Rivers Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Seven Rivers
formation, with injection into the open-hole interval
from approximately 3418 feet to 3429 feet.

(4) That the injection should be accomplished through
2 3/8-inch plastic-lined tubing installed in a packer set at

approximately 3350 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, B. J. Graham, is hereby authorized to utilize ~~its~~ ^{his} Bernice Dinnin A Well No. 2, located in Unit J of Section 23, Township 20 South, Range 33 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3350 feet, with injection into the open-hole interval from approximately 3418 feet to 3429 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 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.