

CASE NO.

6606

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
25 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Getty Oil Company for ) CASE  
salt water disposal, Lea County, New ) 6606  
Mexico. )

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.  
Legal Counsel for the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87503

For the Applicant: William F. Carr, Esq.  
CAMPBELL & BLACK P. A.  
Jefferson Place  
Santa Fe, New Mexico 87501

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
30201/ma Blanca (SCS) 471-4433  
Santa Fe, New Mexico 87501

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
25 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Getty Oil Company for ) CASE  
salt water disposal, Lea County, New ) 6606  
Mexico. )

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.  
Legal Counsel for the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87503

For the Applicant: William F. Carr, Esq.  
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I N D E X

H. W. TERRY

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E X H I B I T S

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3030 Plaza Blanca (SSE) 471-4482  
Santa Fe, New Mexico 87501

1 MR. NUTTER: We'll call now Case Number  
2 6606.

3 MR. PADILLA: Application of Getty Oil  
4 Company for salt water disposal, Lea County, New Mexico.

5 MR. CARR: May it please the Examiner, I  
6 am William F. Carr, Campbell and Black, P. A., Santa Fe,  
7 appearing on behalf of the applicant. I have one witness.

8  
9 (Witness sworn.)

10  
11 H. W. TERRY  
12 being called as a witness and having been duly sworn upon  
13 his oath, testified as follows, to-wit:

14  
15 DIRECT EXAMINATION

16 BY MR. CARR:

17 Q Will you state your full name and place of  
18 residence?

19 A My name is Herman Terry. I reside at 717  
20 Oxford in Odessa, Texas.

21 Q Mr. Terry, by whom are you employed and  
22 in what capacity?

23 A I'm employed by Getty Oil Company in Hobbs,  
24 New Mexico, and I'm the Area Engineer.

25 Q Have you previously testified before this

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3030 Pina Bluffs (985) 471-3482  
Bellaire, Texas 77401

1 Commission and had your credentials accepted and made a mat-  
2 ter of record?

3 A No, I haven't.

4 Q Would you briefly summarize for the Examiner  
5 your educational background and work experience?

6 A Yes. I graduated from Texas Technological  
7 College in May of 1969 with a BS degree in Electrical En-  
8 gineering.

9 I've been with Getty Oil Company for ten  
10 years. I've worked in Andrews, Texas, Gretna, Louisiana,  
11 New Orleans, Louisiana, Crane, Texas.

12 I was transferred to the Hobbs area July  
13 1st of this year.

14 Q Mr. Terry, are you familiar with the ap-  
15 plication of Getty in this case?

16 A Yes, I am.

17 MR. CARR: Are the witness' credentials  
18 acceptable?

19 MR. NUTTER: Yes, they are.

20 Q (Mr. Carr continuing.) Mr. Terry, will  
21 you briefly state what Getty seeks with this application?

22 A We're seeking approval to dispose of salt  
23 water from our Getty State 35 Well No. 1 into the State "AA"  
24 Well No. 1.

25 Q Will you please refer to what has been

1 marked for identification as Getty Exhibit Number One and  
2 explain to the Examiner what it is and what it shows?

3 A This is the application to dispose of salt  
4 water by injection into a porous formation, Form C-108, for  
5 the State "AA" Well No. 1, and it lists the casing that we  
6 propose to run and the various pressures that we propose  
7 to use.

8 Q Mr. Terry, when was this well originally  
9 drilled?

10 A This well was drilled in -- the well was  
11 drilled in 1956 and it was to a depth of 4250. It was  
12 plugged and abandoned as a dry hole on November 4th of  
13 1956.

14 Q Will you now refer to what has been marked  
15 Exhibit Number Two and explain what it is?

16 A Exhibit Number Two is a plat showing the  
17 wells in the area. Also attached is a table listing the  
18 wells in the area and the well -- and the zones that they  
19 produce from.

20 Q And this plat also shows the leases in  
21 the area?

22 A Yes, it does.

23 Q And the table at the end indicates all  
24 producing formations, is that correct?

25 A Yes, it does.

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2010 Plaza Blanca (682) 471-2462  
Santa Fe, New Mexico 87501

1 Q Please refer to what has been marked as  
2 Exhibit Number Three and explain this to the Examiner.

3 A This is a diagrammatic sketch of the pres-  
4 ent completion of what the well is presently and what we  
5 propose to do to the well prior to the injection of water.

6 Q And what is the injection interval?

7 A The injection interval is from 3810 to  
8 41 -- pardon me. 3810 to 4080 feet.

9 Q Mr. Terry, in your opinion, will the pro-  
10 posed completion result in the well being cased and cemented  
11 so as to prevent contamination of oil, gas, and water re-  
12 sources?

13 A Yes, it will.

14 Q What is the source of the water you pro-  
15 pose to inject into the subject well?

16 A It would be water, produced water, from  
17 our Getty 35 State No. 1.

18 Q And what volumes do you anticipate in-  
19 jecting?

20 A Approximately 265 barrels per day.

21 Q Will you be injecting this water under  
22 pressure or by gravity?

23 A By pressure. We anticipate approximately  
24 300 pounds.

25 Q In any event, a pressure limitation of



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1 .2 of a pound per foot of depth would be satisfactory for  
2 your purposes, is that correct?

3 A Be adequate.

4 Q Will you now refer to what has been marked  
5 as Exhibit Number Four and explain this to the Examiner?

6 A This is a water analysis of the produced  
7 water from our Getty 35 State No. 1 that we propose to in-  
8 ject into the well.

9 Q Mr. Terry, are there any wells within  
10 one-half mile of the injection well which penetrate the  
11 injection zone?

12 A Yes, sir, it's our Getty 36 State Com Well  
13 No. 1 is within a half a mile.

14 Q And when was that completed?

15 A It was completed July of this year.

16 Q Will you refer to what has been marked as  
17 Exhibit Number Five and explain what this shows?

18 A This is a diagrammatic sketch of the Getty  
19 36 State Com Well No. 1 that is within a half mile of the  
20 subject well.

21 Q Is this the only well to your knowledge  
22 within the one-half mile radius of the subject well which  
23 penetrates the injection zone?

24 A Yes, it is.

25 Q Will you now refer to Exhibit Number Six

1 and explain this to the Examiner?

2 A. This is the well location and acreage dedi-  
3 cation plat, Form C-102, for the Getty 36 State Com Well  
4 No. 1.

5 Q And now refer to Exhibit Number Seven and  
6 explain this to the Examiner.

7 A This is a gamma ray neutron log of the  
8 State "AA" Well No. 1 that shows the zone that we propose  
9 to inject water into.

10 Q Mr. Terry, in your opinion will granting  
11 this application prevent waste, protect correlative rights,  
12 and be in the interest of conservation?

13 A Yes, it will.

14 Q Were Exhibits One through Seven prepared  
15 by you or have you reviewed them and can you testify as to  
16 their accuracy?

17 A Yes, I can.

18 MR. CARR: At this time, Mr. Examiner, we  
19 would offer into evidence Getty Exhibits One through Seven.

20 MR. NUTTER: Applicant's Exhibits One  
21 through Seven will be admitted in evidence.

22 MR. CARR: I have no further questions of  
23 Mr. Terry on direct.  
24  
25

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CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Terry, looking at your plat, Exhibit Two, I can't tell for sure, but are there any wells within a half a mile of the subject well which have been plugged and abandoned?

A To my knowledge there are no wells that have been plugged and abandoned.

Q And the summary here, which is on Exhibit Number -- or Table I, are the producing wells within two miles of the subject well, is that it?

A They're not necessarily producing at present. They have produced from the zone.

Q These are wells within two miles, though.

A Yes, sir, within two miles.

Q And the nearest well to the subject well would be your Getty 35 - 1.

A The 36 - 1.

Q The 36 - 1, the one that you have the Exhibit Number Five on?

A Yes, sir.

Q And that particular well, there would be two strings of casing opposite the proposed disposal zone, is that correct?

A That's correct.

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1026 Plaza Blanca, (S.S.) 471-2403  
Santa Fe, New Mexico 87501

1 Q Okay. Now, from your analysis of the water,  
2 it would appear that the disposal water has approximately  
3 87,000 parts per million of chlorides, and the total of  
4 dissolved solids of 143,000.

5 Do you have any analysis on the water that  
6 is in the Yates, the formation that you'll be disposing  
7 into?

8 A No, sir, I don't.

9 Q I have a note here from our District office  
10 in Hobbs that states that this may involve outside water  
11 being disposed of into the Capitan Reef. I don't know how  
12 serious it would be but it may be we'll have to check out  
13 the water that's in the formation that you're disposing of  
14 and if that has any possibility of being in communication  
15 with the Capitan Reef, and the water exceeds the -- the  
16 water is of worse quality than the Capitan Reef water, it  
17 may not be permissible.

18 But your proposal is to dispose into the  
19 zone 3810 to 4080, according to Exhibit Three.

20 A Yes, sir.

21 Q I see a note here that the well has cement  
22 plug from 4169 to 4250. Now, that 4080, is that based on  
23 your interpretation of the --

24 A Of the Yates.

25 Q -- porosity in the Yates?

1 A Yes, sir.

2 Q But actually, all the way down to 4169

3 would be a --

4 A Yes, sir, that would be open.

5 Q -- exposed to the water.

6 A Yes, sir.

7 Q The interval from the casing shoe to the

8 cement plug would be exposed to disposal water.

9 A Yes, sir, that's correct.

10 MR. NUTTER: Are there any further ques-  
11 tions of Mr. Terry? He may be excused.

12 Do you have anything further in this case,  
13 Mr. Carr?

14 MR. CARR: Nothing further, Mr. Nutter.

15 MR. NUTTER: Does anyone have anything  
16 they wish to offer in Case Number 6606?

17 We'll take the case under advisement.

18

19 (Hearing concluded.)

20

21

22

23

24

25

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3030 Plaza Blanca (888) 471-4402  
San Antonio, Texas 78201

## REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.  
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6606 heard by me on 7/25 1979.  
[Signature] Examiner  
Oil Conservation Division

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Santa Fe, New Mexico 87501

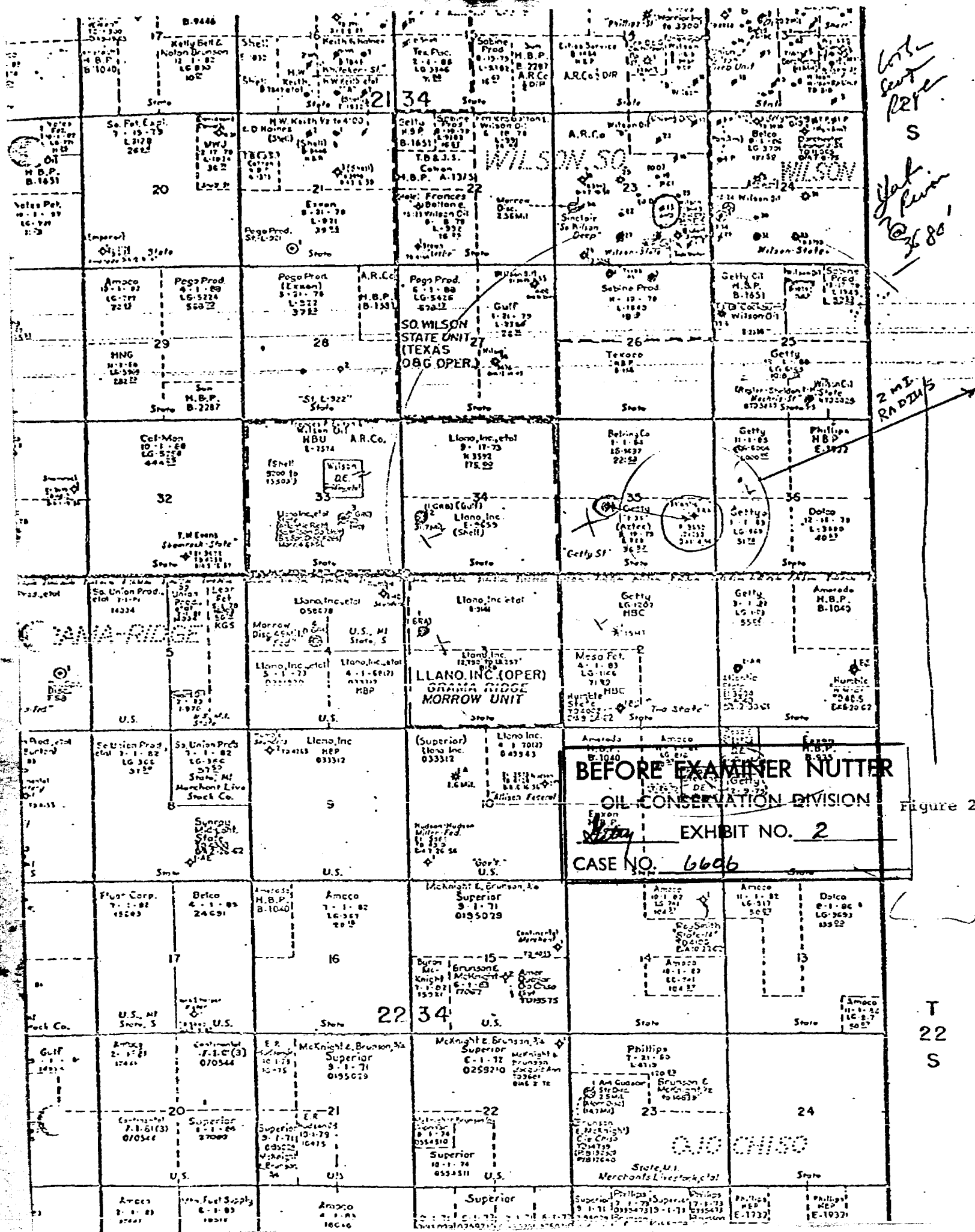
NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Getty Oil Company</b>		ADDRESS <b>P. O. Box 730, Hobbs, NM 88240</b>			
LEASE NAME <b>State "AA"</b>	WELL NO. <b>1</b>	FIELD <b>Unknown</b>	COUNTY <b>Lea</b>		
LOCATION UNIT LETTER <b>I</b> WELL IS LOCATED <b>660</b> FEET FROM THE <b>East</b> LINE AND <b>1980</b> FEET FROM THE <b>South</b> LINE, SECTION <b>35</b> TOWNSHIP <b>21S</b> RANGE <b>34</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>8 5/8"</b>	<b>240'</b>	<b>200</b>	<b>Surface</b>	<b>Circulated</b>
INTERMEDIATE					
LONG STRING (Proposed)	<b>5 1/2"</b>	<b>3810'</b>	<b>1000</b>	<b>Surface</b>	<b>Circulated</b>
TUBING <b>2 3/8"</b>			NAME, MODEL AND DEPTH OF TUBING PACKER <b>Baker "AD"-1 Tension Packer at 3750'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>Yates</b>		TOP OF FORMATION <b>3880'</b>		BOTTOM OF FORMATION <b>4160'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLE? <b>Open Hole</b>		PROPOSED INTERVAL(S) OF INJECTION <b>3920-4000' and 4030-4070'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Oil and Gas</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH <b>N/A</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>200 Feet</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>None</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>10,810'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.)	MINIMUM <b>200</b>	MAXIMUM <b>1200</b>	OPEN OR CLOSED TYPE SYSTEM <b>Closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>300</b>
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 <b>Yes</b>	NATURAL WATER IN DISPOSED ZONE <b>Yes</b>	AND WATER ANALYSES ATTACHED? <b>Yes, for the water to be disposed.</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>State Land</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>None</b>					
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>BEFORE EXAMINER NUTTER</b> <b>OIL CONSERVATION DIVISION</b> <i>Getty</i> EXHIBIT NO. <u>1</u> CASE NO. <u>6606</u></div>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER <b>No</b>		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>N/A</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?		PLAY OF AREA <b>Yes</b>		ELECTRICAL LOG <b>Yes</b>	
				THE NEW MEXICO STATE ENGINEER <b>Yes</b>	
				DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

*David G. Boyer* Area Superintendent 3/14/79  
(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.





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21  
S

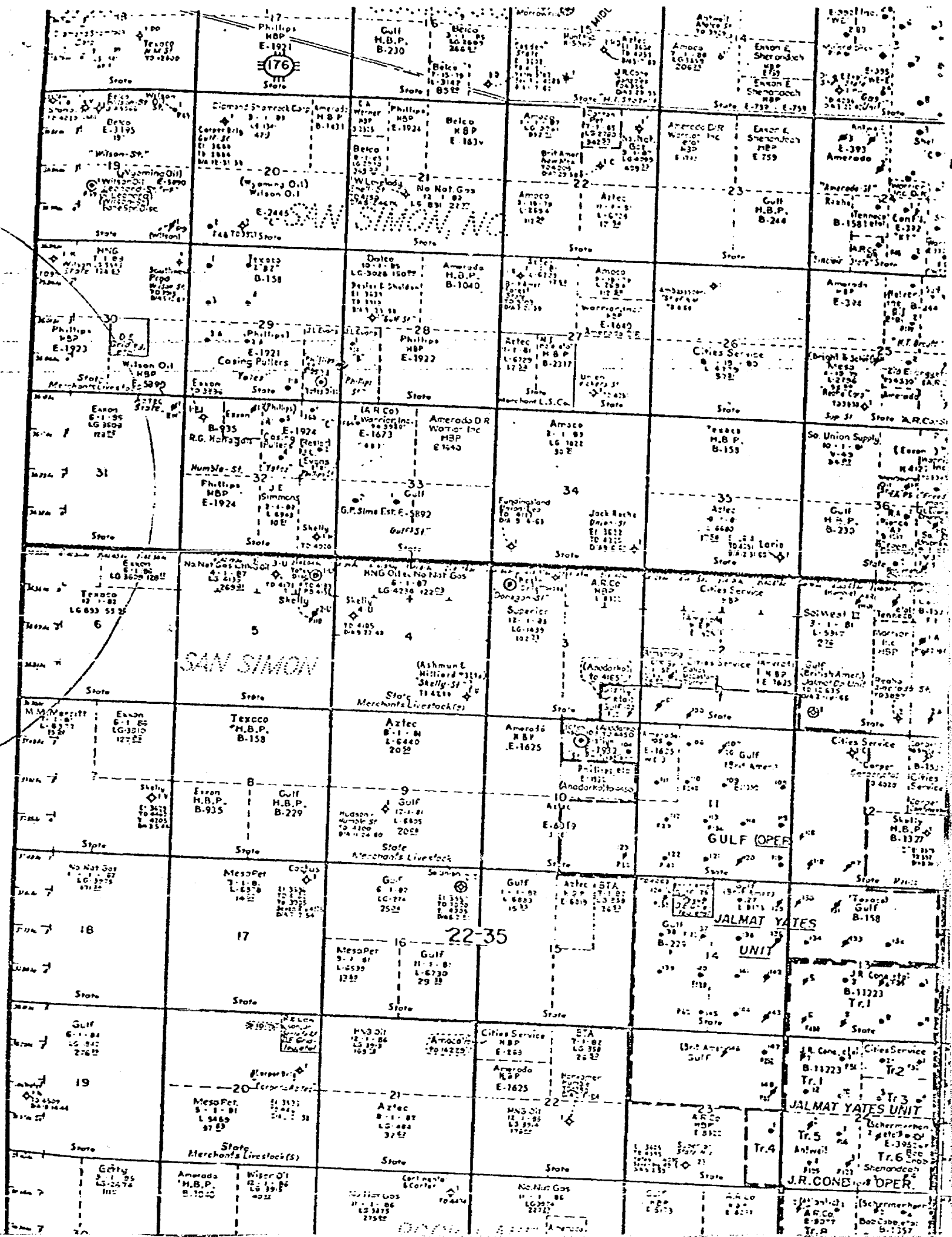
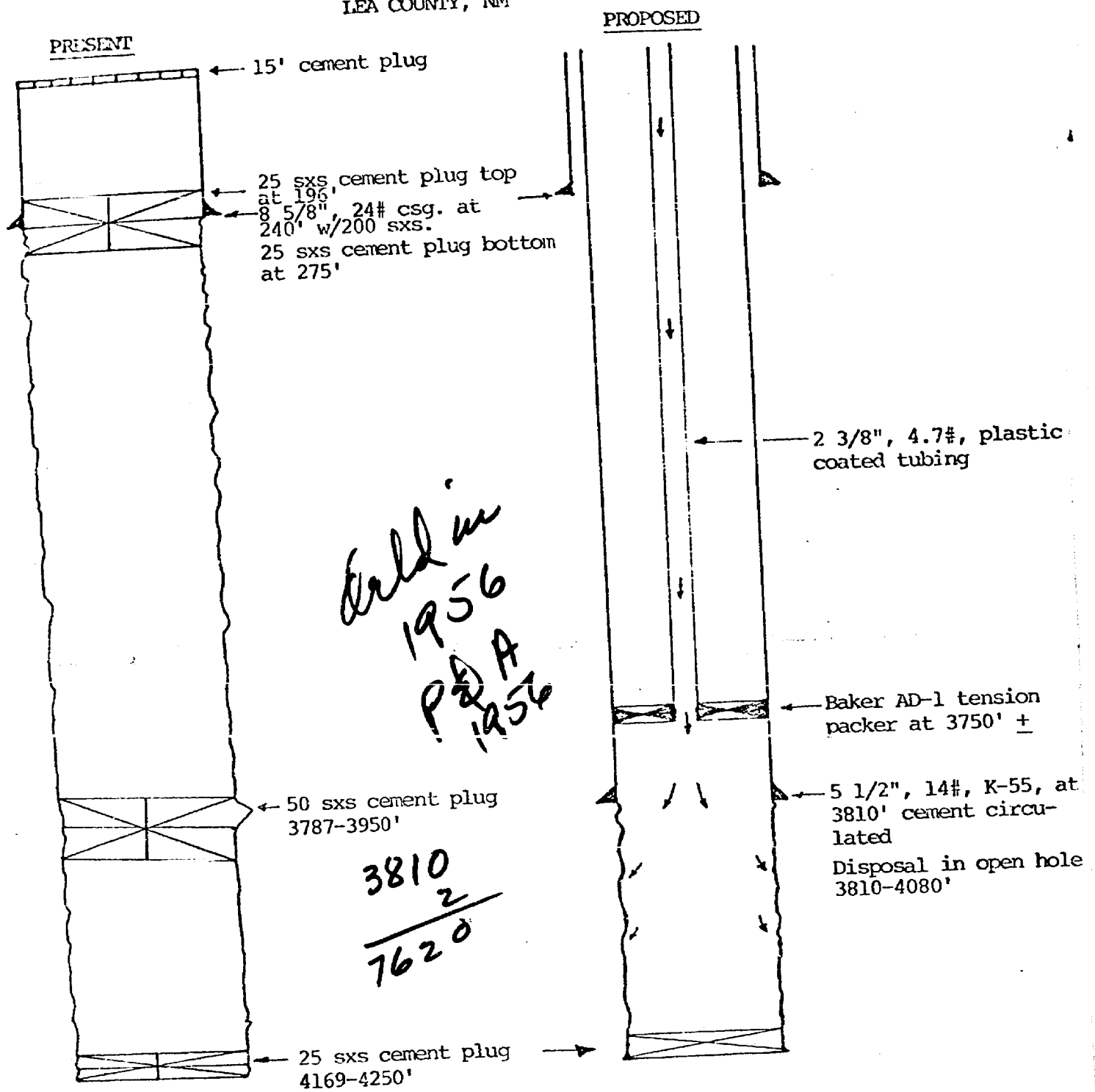


TABLE I

Wilson State #26	Yates - 7 Rivers
Wilson State #27	Yates - 7 Rivers
Wilson State #28	Yates - 7 Rivers
Wilson State #32	Yates - 7 Rivers
Wilson State #33	Yates - 7 Rivers
Wilson State #35	Yates - 7 Rivers
Wilson State #36	Yates - 7 Rivers
Wilson State L #1	Yates - 7 Rivers
Texas Co. State AC #1	Yates - 7 Rivers
Texas Co. State AC #2	Yates - 7 Rivers
Humble State "BV" #1	Yates - 7 Rivers
Humble State "BS" #1	Yates - 7 Rivers
Atlantic Rfg. Co. State "AR" #1	Yates - 7 Rivers
Getty 35 State #1	Bone Springs, Morrow
Getty Two State #1	Morrow
Llano 3 State #1	Grama Ridge Morrow
Llano 34 State #2	Morrow

STATE "AA" WELL NO. 1  
SEC. 35, T-21-S, R-34E  
LEA COUNTY, NM



*high press  
300 psi @  
well head.*

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
*Letty* EXHIBIT NO. 3  
CASE NO. 6606



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

Company     Getty Oil Company

Field                      Wolfcamp

lease      Getty 35 State #1

Sampling Date 2-5-79

Type of Sample Wellhead

## WATER ANALYSIS

- mg/l = milligrams per Liter
- me/l = milliequivalents per Liter

CaCO<sub>3</sub> S.I. negative (0.36)

CaSO<sub>4</sub> S.I. negative (1.11)

U-LAB 31 (REV. 6/78)

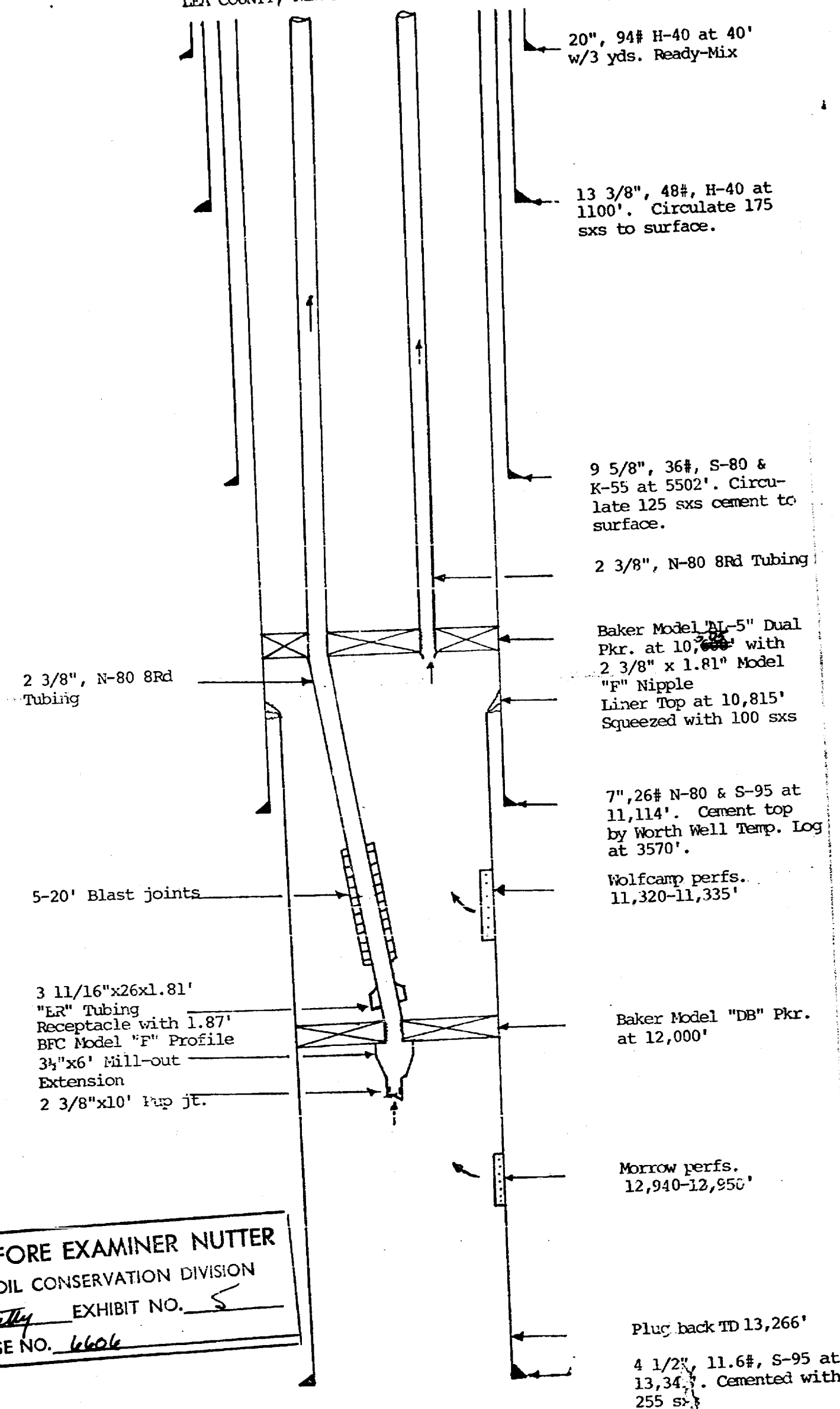
**BEFORE EXAMINER NUTTER**

OIL CONSERVATION DIVISION

Letter EXHIBIT NO. 4

CASE NO. 6606

EXHIBIT  
GETTY "36" STATE COM. NO. 1  
MORROW-WOLFCAMP DUAL COMPLETION  
LEA COUNTY, NEW MEXICO



BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
*Getty* EXHIBIT NO. 5  
CASE NO. 6606

043-NMOCC  
1-R.J. Starrak-Tulsa  
1-A.B. Cary-Midland  
1-File  
1-Foreman

MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-12H  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

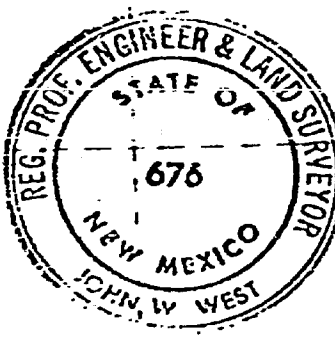
Getty Oil Co.		Getty '36" State		1	
F	36	21 South	34 East	Lea	
1930	North	1650	West		
3674.1	Producing Formation	Grama Ridge	640	A	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

1980	
1650	
1	
BEFORE EXAMINER NUTTER OIL CONSERVATION DIVISION <u>Getty</u> EXHIBIT NO. <u>6</u> CASE NO. <u>6606</u>	
	

CERTIFICATION

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

ORIGINAL SIGNED BY  
DALE R. CROCKETT

Dale R. Crockett

Area Superintendent

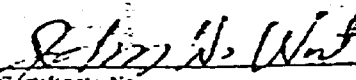
Getty Oil Company

February 12, 1979

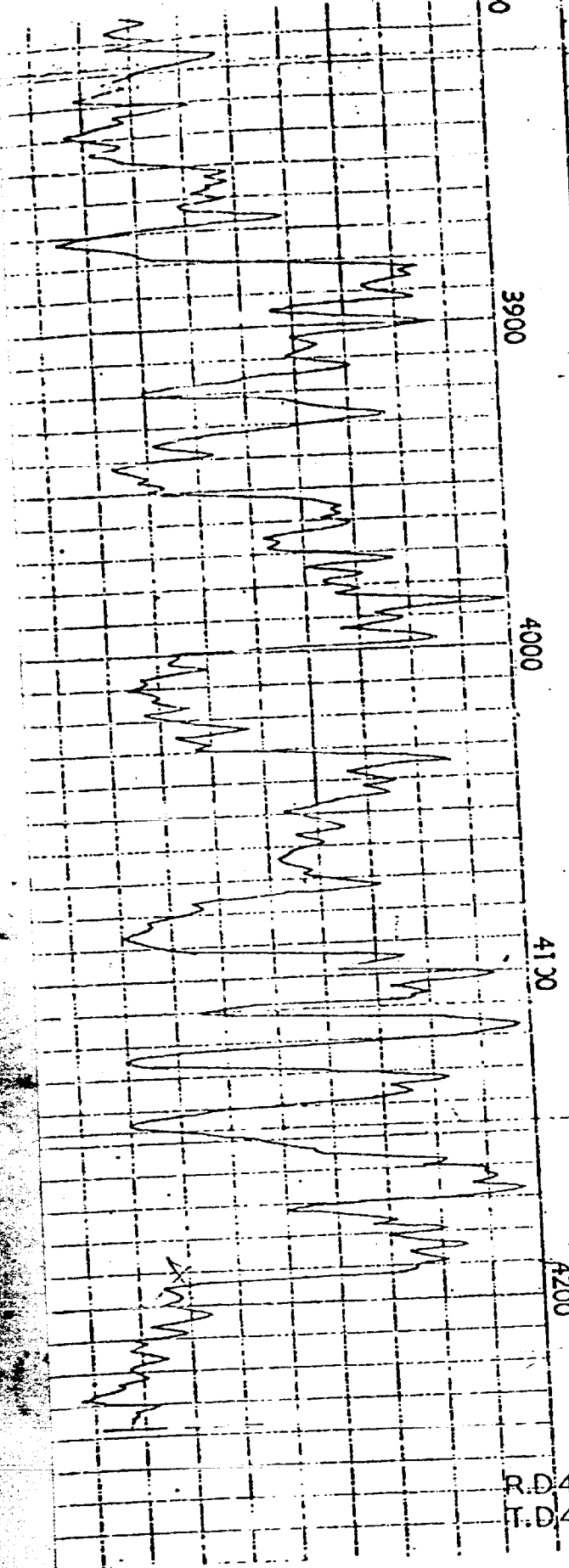
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

February 2, 1979

Registered Professional Engineer  
John W. West

  
Certificate No. John W. West 676

GAMMA RAY  
STATE "AA" No. 1  
Sec. 35, T. 21. S, R. 34. E  
LEA COUNTY, NM

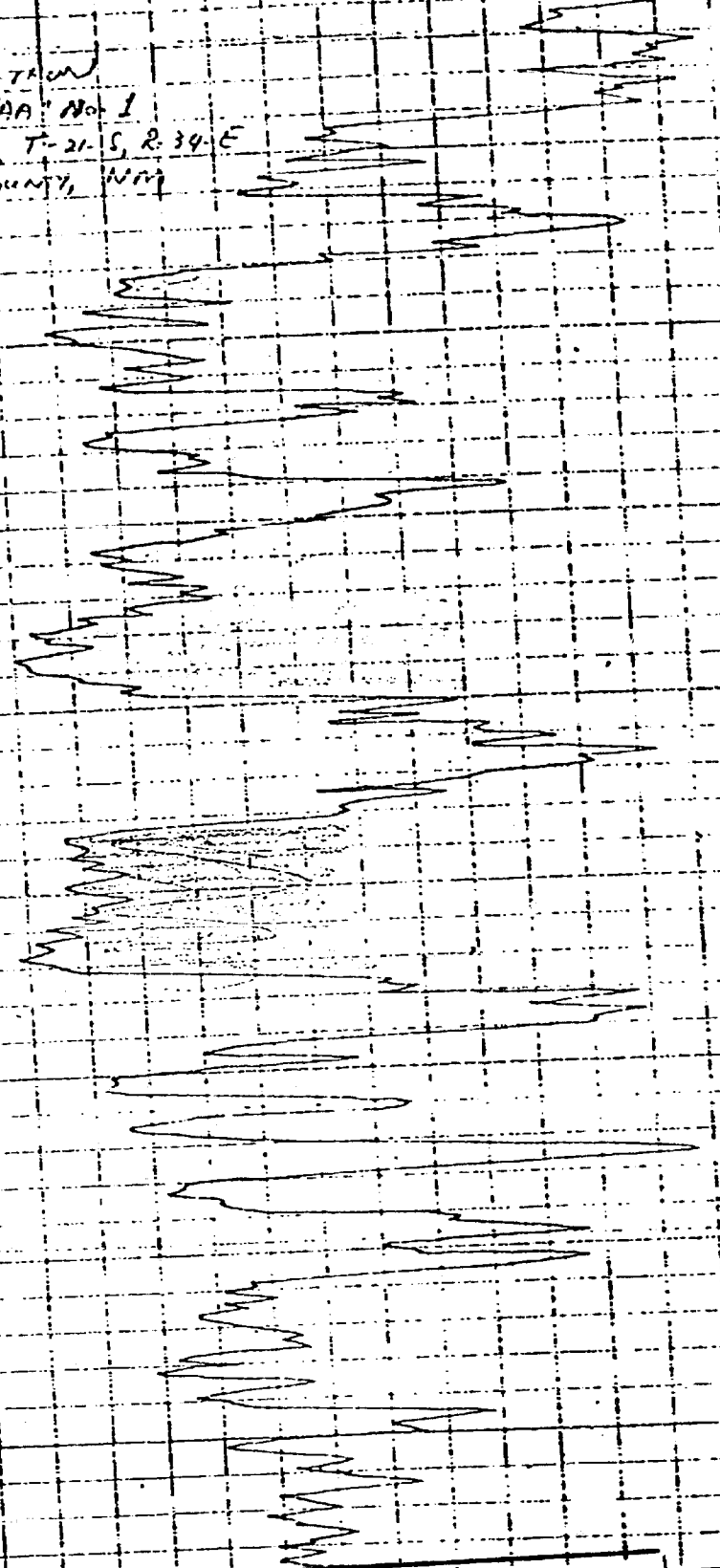


R.D.4246  
T.D.4247

GAMMA RAY  
RADIATION UNITS

DETAIL SECTION BELOW

Photo



BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
EXHIBIT NO. 7  
CASE NO. 6606

NEUTRON  
ENVIRONMENTAL UNITS





BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

**August 17, 1979**

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STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Mr. William F. Carr  
Campbell & Black  
Attorneys at Law  
Post Office Box 2208  
Santa Fe, New Mexico

Re: CASE NO. 6606  
ORDER NO. R-6080

**Applicant:**

Getty Oil Company

**Dear Sir:**

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

Yours very truly,

**JOE D. RAMEY**  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD	<u>x</u>
Artesia OCD	<u>x</u>
Aztec OCD	

Other \_\_\_\_\_



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
State Land Office Building  
Santa Fe, New Mexico  
25 July 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Getty Oil Company for  
salt water disposal, Lea County, New  
Mexico.

CASE  
6606

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

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Division:

Ernest L. Padilla, Esq.  
Legal Counsel for the Division  
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For the Applicant:

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# I N D E X

H. W. TERRY

Direct Examination by Mr. Carr

3

Cross Examination by Mr. Nutter

9

## E X H I B I T S

Applicant Exhibit One, Application

5

Applicant Exhibit Two, Plat

5

Applicant Exhibit Three, Sketch

6

Applicant Exhibit Four, Water Analysis

7

Applicant Exhibit Five, Sketch

7

Applicant Exhibit Six, C-102

7

Applicant Exhibit Seven, Log

8

SALLY WALTON BOYD  
(CERTIFIED SHORTHAND REPORTER)  
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Santa Fe, New Mexico 87501

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MR. NUTTER: We'll call now Case Number

6606.

MR. PADILLA: Application of Getty Oil Company for salt water disposal, Lea County, New Mexico.

MR. CARR: May it please the Examiner, I am William F. Carr, Campbell and Black, P. A., Santa Fe, appearing on behalf of the applicant. I have one witness.

(Witness sworn.)

H. W. TERRY

being called as a witness and having been duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place of residence?

A My name is Herman Terry. I reside at 717 Oxford in Odessa, Texas.

Q Mr. Terry, by whom are you employed and in what capacity?

A I'm employed by Getty Oil Company in Hobbs, New Mexico, and I'm the Area Engineer.

Q Have you previously testified before this

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Beck, Tex., New Mexico 87001

1 Commission and had your credentials accepted and made a mat-  
2 ter of record?

3 A No, I haven't.

4 Q Would you briefly summarize for the Examiner  
5 your educational background and work experience?

6 A Yes. I graduated from Texas Technological  
7 College in May of 1969 with a BS degree in Electrical En-  
8 gineering.

9 I've been with Getty Oil Company for ten  
10 years. I've worked in Andrews, Texas, Gretna, Louisiana,  
11 New Orleans, Louisiana, Crane, Texas.

12 I was transferred to the Hobbs area July  
13 1st of this year.

14 Q Mr. Terry, are you familiar with the ap-  
15 plication of Getty in this case?

16 A Yes, I am.

17 MR. CARR: Are the witness' credentials  
18 acceptable?

19 MR. NUTTER: Yes, they are.

20 Q (Mr. Carr continuing.) Mr. Terry, will  
21 you briefly state what Getty seeks with this application?

22 A We're seeking approval to dispose of salt  
23 water from our Getty State 35 Well No. 1 into the State "AA"  
24 Well No. 1.

25 Q Will you please refer to what has been

1 marked for identification as Getty Exhibit Number One and  
2 explain to the Examiner what it is and what it shows?

3 A This is the application to dispose of salt  
4 water by injection into a porous formation, Form C-108, for  
5 the State "AA" Well No. 1, and it lists the casing that we  
6 propose to run and the various pressures that we propose  
7 to use.

8 Q Mr. Terry, when was this well originally  
9 drilled?

10 A This well was drilled in -- the well was  
11 drilled in 1956 and it was to a depth of 4250. It was  
12 plugged and abandoned as a dry hole on November 4th of  
13 1956.

14 Q Will you now refer to what has been marked  
15 Exhibit Number Two and explain what it is?

16 A Exhibit Number Two is a plat showing the  
17 wells in the area. Also attached is a table listing the  
18 wells in the area and the well -- and the zones that they  
19 produce from.

20 Q And this plat also shows the leases in  
21 the area?

22 A Yes, it does.

23 Q And the table at the end indicates all  
24 producing formations, is that correct?

25 A Yes, it does.

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SALLY WALTON BOYD  
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2010 Plaza Blanca (966) 471-2482  
San Antonio, New Mexico 87501

1 Q Please refer to what has been marked as  
2 Exhibit Number Three and explain this to the Examiner.

3 A This is a diagrammatic sketch of the pres-  
4 ent completion of what the well is presently and what we  
5 propose to do to the well prior to the injection of water.

6 Q And what is the injection interval?

7 A The injection interval is from 3810 to  
8 41 -- pardon me. 3810 to 4080 feet.

9 Q Mr. Terry, in your opinion, will the pro-  
10 posed completion result in the well being cased and cemented  
11 so as to prevent contamination of oil, gas, and water re-  
12 sources?

13 A Yes, it will.

14 Q What is the source of the water you pro-  
15 pose to inject into the subject well?

16 A It would be water, produced water, from  
17 our Getty 35 State No. 1.

18 Q And what volumes do you anticipate in-  
19 jecting?

20 A Approximately 265 barrels per day.

21 Q Will you be injecting this water under  
22 pressure or by gravity?

23 A By pressure. We anticipate approximately  
24 300 pounds.

25 Q In any event, a pressure limitation of

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1 .2 of a pound per foot of depth would be satisfactory for  
 2 your purposes, is that correct?

3 A Be adequate.

4 Q Will you now refer to what has been marked  
 5 as Exhibit Number Four and explain this to the Examiner?

6 A This is a water analysis of the produced  
 7 water from our Getty 35 State No. 1 that we propose to in-  
 8 ject into the well.

9 Q Mr. Terry, are there any wells within  
 10 one-half mile of the injection well which penetrate the  
 11 injection zone?

12 A Yes, sir, it's our Getty 36 State Com Well  
 13 No. 1 is within a half a mile.

14 Q And when was that completed?

15 A It was completed July of this year.

16 Q Will you refer to what has been marked as  
 17 Exhibit Number Five and explain what this shows?

18 A This is a diagrammatic sketch of the Getty  
 19 36 State Com Well No. 1 that is within a half mile of the  
 20 subject well.

21 Q Is this the only well to your knowledge  
 22 within the one-half mile radius of the subject well which  
 23 penetrates the injection zone?

24 A Yes, it is.

25 Q Will you now refer to Exhibit Number Six

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San Antonio, Texas 78201

1 and explain this to the Examiner?

2 A This is the well location and acreage dedi-  
3 cation plat, Form C-102, for the Getty 36 State Com Well  
4 No. 1.

5 Q And now refer to Exhibit Number Seven and  
6 explain this to the Examiner.

7 A This is a gamma ray neutron log of the  
8 State "AA" Well No. 1 that shows the zone that we propose  
9 to inject water into.

10 Q Mr. Terry, in your opinion will granting  
11 this application prevent waste, protect correlative rights,  
12 and be in the interest of conservation?

13 A Yes, it will.

14 Q Were Exhibits One through Seven prepared  
15 by you or have you reviewed them and can you testify as to  
16 their accuracy?

17 A Yes, I can.

18 MR. CARR: At this time, Mr. Examiner, we  
19 would offer into evidence Getty Exhibits One through Seven.

20 MR. NUTTER: Applicant's Exhibits One  
21 through Seven will be admitted in evidence.

22 MR. CARR: I have no further questions of  
23 Mr. Terry on direct.  
24  
25



CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Terry, looking at your plat, Exhibit Two, I can't tell for sure, but are there any wells within a half a mile of the subject well which have been plugged and abandoned?

A To my knowledge there are no wells that have been plugged and abandoned.

Q And the summary here, which is on Exhibit Number -- or Table I, are the producing wells within two miles of the subject well, is that it?

A They're not necessarily producing at present. They have produced from the zone.

Q These are wells within two miles, though.

A Yes, sir, within two miles.

Q And the nearest well to the subject well would be your Getty 35 - 1.

A The 36 - 1.

Q The 36 - 1, the one that you have the Exhibit Number Five on?

A Yes, sir.

Q And that particular well, there would be two strings of casing opposite the proposed disposal zone, is that correct?

A That's correct.

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3030 Plaza Blanca (695) 471-2462  
Santa Fe, New Mexico 87501

1 Q Okay. Now, from your analysis of the water,  
2 it would appear that the disposal water has approximately  
3 87,000 parts per million of chlorides, and the total of  
4 dissolved solids of 143,000.

5 Do you have any analysis on the water that  
6 is in the Yates, the formation that you'll be disposing  
7 into?

8 A No, sir, I don't.

9 Q I have a note here from our District office  
10 in Hobbs that states that this may involve outside water  
11 being disposed of into the Capitan Reef. I don't know how  
12 serious it would be but it may be we'll have to check out  
13 the water that's in the formation that you're disposing of  
14 and if that has any possibility of being in communication  
15 with the Capitan Reef, and the water exceeds the -- the  
16 water is of worse quality than the Capitan Reef water, it  
17 may not be permissible.

18 But your proposal is to dispose into the  
19 zone 3810 to 4080, according to Exhibit Three.

20 A Yes, sir.

21 Q I see a note here that the well has cement  
22 plug from 4169 to 4250. Now, that 4080, is that based on  
23 your interpretation of the --

24 A Of the Yates.

25 Q -- porosity in the Yates?

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Santa Fe, New Mexico 87501

1 A Yes, sir.  
2 Q But actually, all the way down to 4169  
3 would be a --  
4 A Yes, sir, that would be open.  
5 Q -- exposed to the water.  
6 A Yes, sir.  
7 Q The interval from the casing shoe to the  
8 cement plug would be exposed to disposal water.  
9 A Yes, sir, that's correct.  
10 MR. NUTTER: Are there any further ques-  
11 tions of Mr. Terry? He may be excused.  
12 Do you have anything further in this case,  
13 Mr. Carr?  
14 MR. CARR: Nothing further, Mr. Nutter.  
15 MR. NUTTER: Does anyone have anything  
16 they wish to offer in Case Number 6606?  
17 We'll take the case under advisement.  
18  
19 (Hearing concluded.)  
20  
21  
22  
23  
24  
25

## REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, knowledge, and skill, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete report of the proceedings in the Examiner hearing of Case No. 6609 heard by me on 7/25 1979.

[Signature] Examiner  
Oil Conservation Division

SALLY WALTON BOYD  
CERTIFIED SHORTHAND REPORTER  
3020 Plaza Blanca (SOS) 411-4462  
Santa Fe, New Mexico 87501

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6606  
Order No. R-6080

APPLICATION OF GETTY OIL COMPANY  
FOR SALT WATER DISPOSAL, LEA  
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25, 1979,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 16th day of August, 1979, the Division  
Director, 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 Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Getty Oil Company, is the owner  
and operator of the State "AA" Well No. 1, located in Unit I  
of Section 35, Township 21 South, Range 34 East, NMPM, East  
Grama Ridge Field, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the Yates formation, with  
injection into the open-hole interval from approximately 3810  
feet to 4169 feet.

(4) That the injection should be accomplished through  
2 3/8-inch plastic lined tubing installed in a packer set at  
approximately 3750 feet; that the casing-tubing annulus should  
be filled with an inert fluid; and that a pressure gauge or  
approved leak detection device should be attached to the annulus  
in order to determine leakage in the casing, tubing, or packer.

-2-

Case No. 6606

Order No. R-6080

(5) That the injection well or system should be equipped with a pressure regulator or other acceptable device which will limit the wellhead pressure on the injection well to no more than 750 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) 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, Getty Oil Company, is hereby authorized to utilize its State "AA" Well No. 1, located in Unit I of Section 35, Township 21 South, Range 34 East, NMPM, East Grama Ridge Field, Lea County, New Mexico, to dispose of produced salt water into the Yates formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3750 feet, with injection into the open-hole interval from approximately 3810 feet to 4169 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 shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a pressure regulator or other acceptable device which will limit the wellhead pressure on the injection well to no more than 750 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

-3-

Case No. 6606  
Order No. R-6080

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



*Joe D. Ramey*  
JOE D. RAMEY  
Director

S E A L

fd/

## NEW MEXICO OIL CONSERVATION COMMISSION

## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

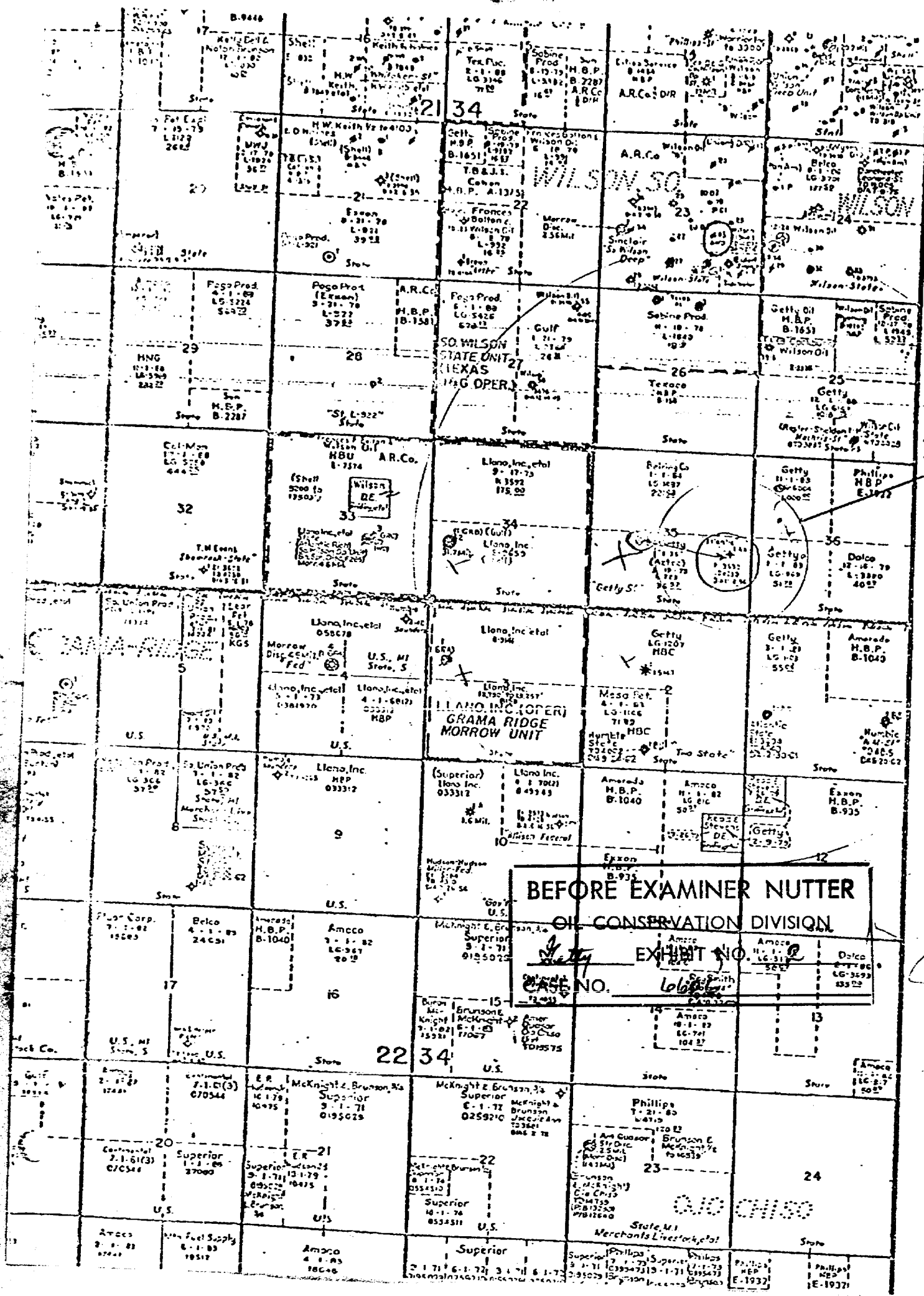
OPERATOR Getty Oil Company		ADDRESS P. O. Box 730, Hobbs, NM 88240			
LEASE NAME State "AA"	WELL NO. 1	FIELD Unknown	COUNTY Lea		
LOCATION UNIT LETTER <u>I</u> ; WELL IS LOCATED <u>660</u> FEET FROM THE <u>East</u> LINE AND <u>1980</u> FEET FROM THE <u>South</u> LINE, SECTION <u>35</u> TOWNSHIP <u>21S</u> RANGE <u>34</u> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	8 5/8"	240'	200	Surface	Circulated
INTERMEDIATE					
LONG STRING					
(Proposed)	5 1/2"	3810'	1000	Surface	Circulated
TUBING	2 3/8"		NAME, MODEL AND DEPTH OF TUBING PACKER Baker "AD"-1 Tension Packer at 3750'		
NAME OF PROPOSED INJECTION FORMATION Yates		TOP OF FORMATION 3880'		BOTTOM OF FORMATION 4160'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Open Hole		PROPOSED INTERVAL(S) OF INJECTION 3920-4000' and 4030-4070'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil and Gas		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					
N/A					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 200 Feet		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 10,810'	
ANTICIPATED DAILY INJECTION VOLUME (BBL/DAY)	MINIMUM 200	MAXIMUM 1200	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 300
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? Yes, for the water to be disposed.
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) State Land					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL None					
<b>BEFORE EXAMINER NUTTER</b>					
OIL CONSERVATION DIVISION					
<u>State</u> EXHIBIT NO. <u>1</u>					
CASE NO. <u>6606</u>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER No		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL N/A	
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.

David C. Kuy  
(Signature)Area Superintendent  
(Title)3/14/79  
(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.





lost  
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Yak  
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@ 2.80

2 MI. RADIUS

Figure 2

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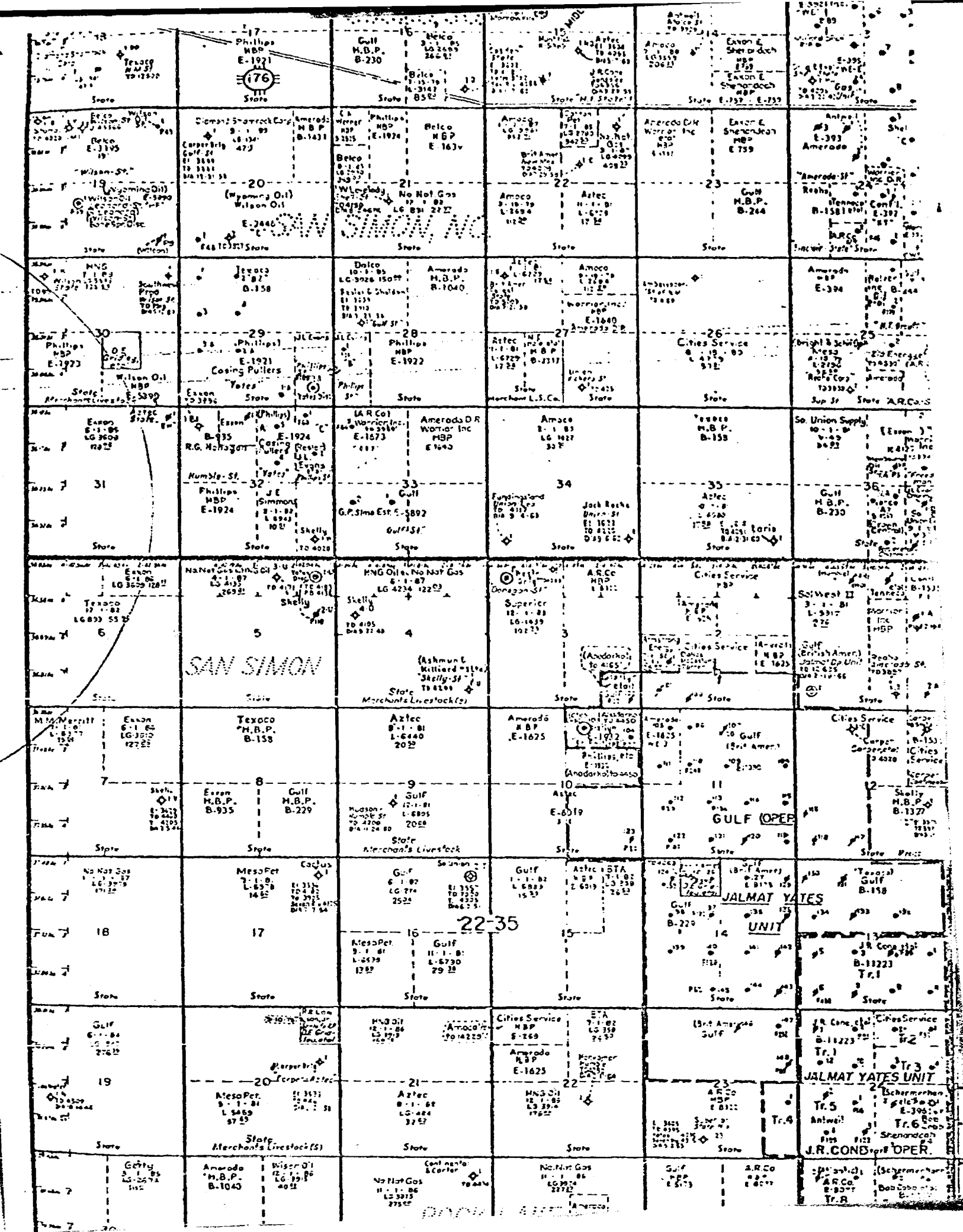
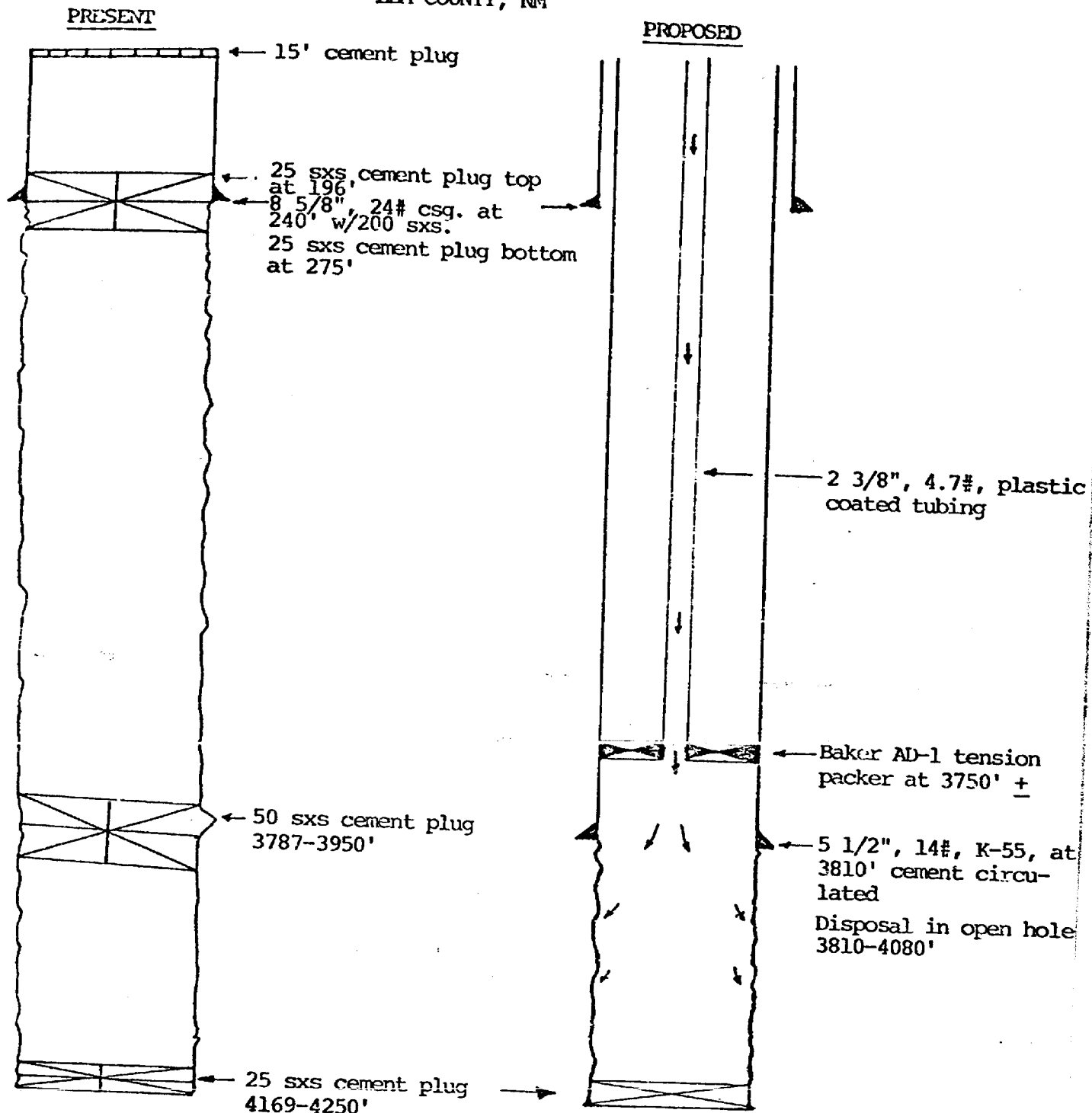


TABLE I

Wilson State #26	Yates - 7 Rivers
Wilson State #27	Yates - 7 Rivers
Wilson State #28	Yates - 7 Rivers
Wilson State #32	Yates - 7 Rivers
Wilson State #33	Yates - 7 Rivers
Wilson State #35	Yates - 7 Rivers
Wilson State #36	Yates - 7 Rivers
Wilson State L #1	Yates - 7 Rivers
Texas Co. State AC #1	Yates - 7 Rivers
Texas Co. State AC #2	Yates - 7 Rivers
Humble State "BV" #1	Yates - 7 Rivers
Humble State "BS" #1	Yates - 7 Rivers
Atlantic Rfg. Co. State "AR" #1	Yates - 7 Rivers
Getty 35 State #1	Bone Springs, Morrow
Getty Two State #1	Morrow
Llano 3 State #1	Grama Ridge Morrow
Llano 34 State #2	Morrow

STATE "AA" WELL NO. 1  
SEC. 35, T-21-S, R-34E  
LEA COUNTY, NM

Figure 1



BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

*Nutter* EXHIBIT NO. 3

CASE NO. 6606



Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

Company . Getty Oil Company

Field.....Wolfcamp

Lease ..... Getty 35 State #1

Sampling Date 2-5-79

Type of Sample Wellhead

## WATER ANALYSIS

WATER ANALYSIS		me/l *	mg/l *
IONIC FORM			
Calcium (Ca++)		230.00	4,600
Magnesium (Mg++)	(CALCULATED)	250.00	3,000
Sodium (Na+)		2020.10	46,442
Iron (Total)			3.8
Bicarbonate (HCO <sub>3</sub> -)		6.00	366
Carbonate (CO <sub>3</sub> -)		Not	Found
Hydroxide (OH-)		Not	Found
Sulphate (SO <sub>4</sub> -)		40.70	1,555
Chloride (Cl-)		2453.40	87,000
			143,363
Total Dissolved Solids			
6.0 ph c	68 °F		
Dissolved Solids on Evap. at 103°-105° C		480.00	24,000
Hardness as Ca CO <sub>3</sub>		6.00	300
Carbonate Hardness as CaCO <sub>3</sub> (temporary)		474.00	23,700
Non-Carbonate Hardness as CaCO <sub>3</sub> (permanent)		6.00	300
Alkalinity as CaCO <sub>3</sub>			
Specific Gravity @ 68° F	1.100		

= mg/l = milligrams per liter

- me/l = milliequivalents per Liter

$\text{CaCO}_3$  S.I. negative (0.36)

CaSO<sub>4</sub> S.I. negative (1.11)

U-LAB 31 (REV. 6/78)

BEFORE EXAMINER NUTTER

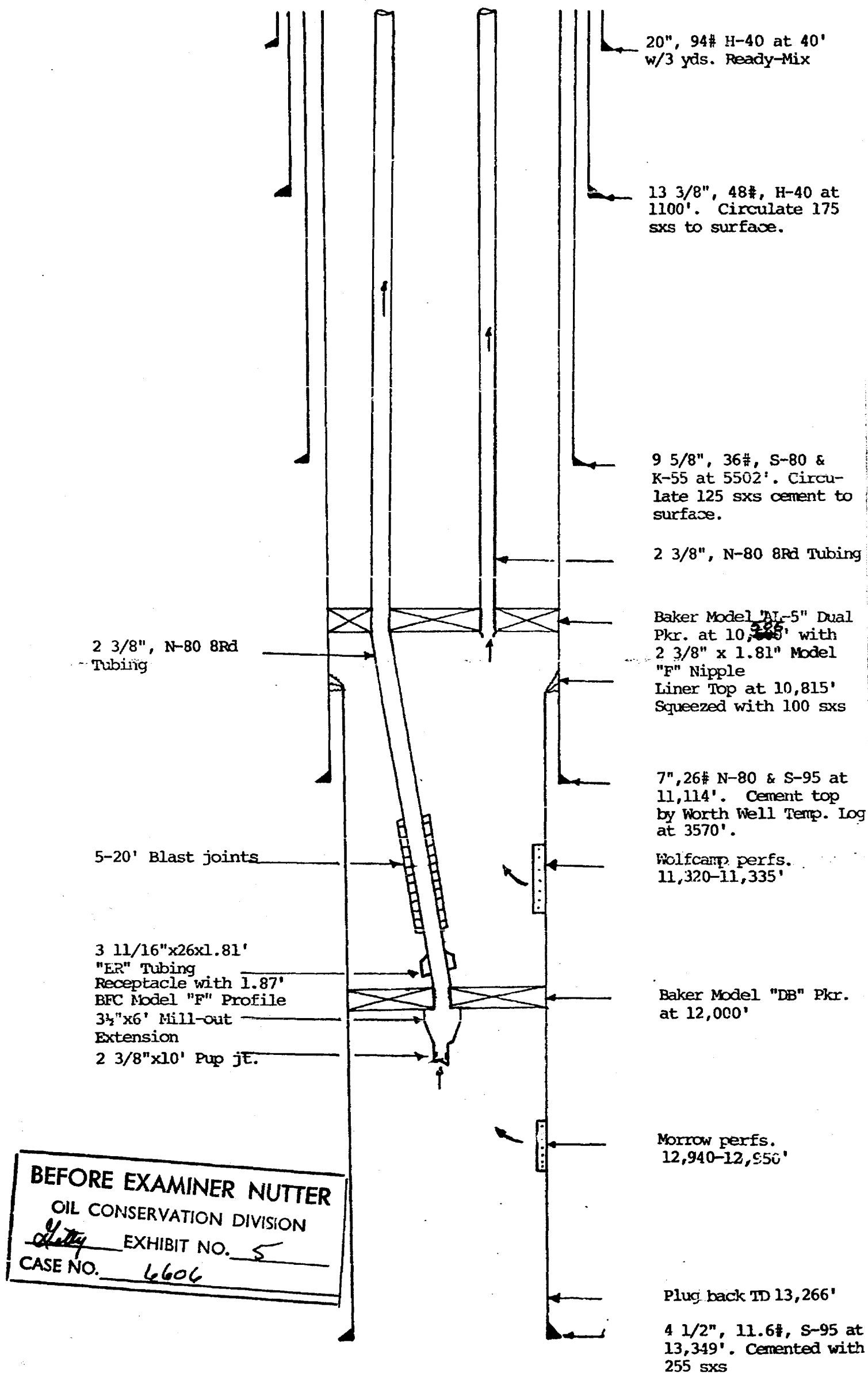
OIL CONSERVATION DIVISION

Lathey EXHIBIT NO. 4

CASE NO. 6606

EXHIBIT  
GETTY "36" STATE COM. NO. 1  
MORROW-WOLFCAMP DUAL COMPLETION  
LEA COUNTY, NEW MEXICO

NYM



BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
*Getty* EXHIBIT NO. 5  
CASE NO. 6606

0+3-NMOCC  
1-R.J. Starrak-Tulsa  
1-A.B. Cary-Midland  
1-File  
1-Foreman

MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-122  
Supersedes C-121  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Getty Oil Co.		Getty '36' State		1	
F	36	21 South	34 East	Leo	
1900		North	1650	West	
3674.1		Grama Ridge		640	

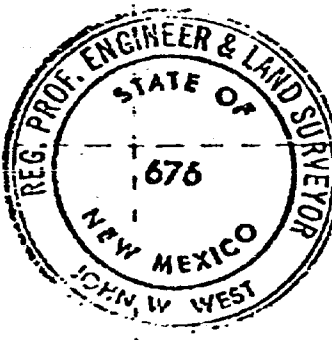
1. Outline the acreage dedicated to the subject well by colored pencil or barbed marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION DIVISION	
EXHIBIT NO. 6	
CASE NO. 6606	



CERTIFICATION

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

ORIGINAL SIGNED BY  
DALE R. CROCKETT

Dale R. Crockett

Area Superintendent

Getty Oil Company

February 12, 1979

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

February 3, 1979

Registered Professional Engineer  
John W. West

*John W. West*  
Certificate No. John W. West 676



GAMMA RAY  
STATE "AA" No. 1  
Sec. 35, T-21-S, R-34-E  
LEA County, NM

3900

4000

4100

4200

R.D. 4246  
T.D. 4247

DETAIL SECTION BELOW

GAMMA RAY

RADIATION UNITS

BEFORE EXAMINER NUTTER

OIL CONSERVATION DIVISION

EXHIBIT NO. 7

CASE NO. 6606

NEUTRON

ENVIRONMENTAL UNITS

1200



Dockets Nos. 29-79 and 31-79 are tentatively set for hearing on August 8 and 22, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - TUESDAY - JULY 24, 1979

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6596: Application of Harvey E. Yates Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Upper Pennsylvanian gas pool to be designated as the Southeast Indian Basin-Upper Pennsylvanian Gas Pool for its Southeast Indian Basin Well No. 1 located in Unit A of Section 23, Township 22 South, Range 23 East, and special pool rules therefor including 320-acre gas well spacing.

CASE 6597: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Southeast Indian Basin Well No. 2, an Upper Pennsylvanian well to be drilled 660 feet from the North and West lines of Section 24, Township 22 South, Range 23 East, with the N/2 or all of said Section 24 to be dedicated to the well, depending on the outcome of Case No. 6596.

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DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 25, 1979

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

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 6545: (Continued from June 27, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit G of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6598: Application of Gulf Oil Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Otero-Gallup and Basin-Dakota production in the wellbores of its Apache Federal Wells No. 8 located in Unit C of Section 8 and No. 9 located in Unit D of Section 17, both in Township 24 North, Range 5 West.

CASE 6599: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fusselman and Montoya production, North Justis Field, in the wellbore of its W. A. Ramsay Well No. 4 located in Unit M of Section 36, Township 24 South, Range 37 East.

CASE 6600: Application of Mesa Petroleum Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 10, Township 16 South, Range 27 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6601: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp through Mississippian formations underlying the E/2 of Section 8, Township 14 South, Range 36 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6602: Application of Tenneco Oil Company for an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 33 C No. 2 Well 1010 feet from the North line and 1710 feet from the West line of Section 33, Township 17 South, Range 29 East, South Empire-Wolfcamp Pool, the E/2 NW/4 of said Section 33 to be dedicated to the well.

CASE 6603: (This case will be continued to the August 8 hearing.)

Application of Conoco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Penrose Skelly and Eumont production in the wellbore of its Hawk B-1 Well No. 12 located in Unit O of Section 8, Township 21 South, Range 37 East.

CASE 6604: Application of Cities Service Company for rescission of Division Order No. R-5921, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of Order No. R-5921 which order provided for the compulsory pooling of all of the mineral interests in the Pennsylvanian formation underlying the S/2 of Section 8, Township 23 South, Range 28 East.

CASE 6605: Application of Estoril Producing Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the W/2 of Section 15, Township 20 South, Range 34 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North and West lines of said Section 15. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6564: (Continued and Readvertised)

Application of Herndon Oil & Gas Co. for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its O. A. Woody Well No. 1 to be drilled 2310 feet from the North line and 330 feet from the West line of Section 35, Township 16 South, Range 38 East, Knowles-Devonian Pool.

CASE 6606: Application of Getty Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Yates formation in the open-hole interval from 3810 feet to 4169 feet in its State "AA" Well No. 1 located in Unit I of Section 35, Township 21 South, Range 34 East.

CASE 6607: Application of Getty Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, to produce oil from the Wolfcamp formation and gas from the Morrow formation through parallel strings of tubing.

CASE 6608: Application of Getty Oil Company for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for its Getty 36 State Well No. 1 located in Unit F of Section 36, Township 21 South, Range 34 East, and special rules therefor, including 160-acre oil well spacing.

CASE 6609: Application of Napeco Inc. for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn oil pool for its Benson Deep Unit Well No. 1 located in Unit O of Section 33, Township 18 South, Range 30 East, and special rules therefor, including 160-acre spacing and standard well locations.

CASE 6610: Application of Koch Industries, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Rustler formation through the perforated interval from 1190 feet to 1210 feet in its Willis "A" Well No. 7 located in Unit E of Section 35, Township 26 South, Range 37 East, Rhodes Field.

CASE 6611: Application of Cabot Corp. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the disposal of produced salt water in the Devonian formation through the perforated interval from 12,156 feet to 12,574 feet in its Reed Well No. 1 located in Unit H of Section 35, Township 13 South, Range 37 East, King Field.

CASE 6487: (Continued from May 23, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Shell E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6471: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Freeman Well No. 1-A to be located in Unit C of Section 11, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6472: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Jenny Well No. 1-A to be located in Unit P of Section 13, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6473: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its McIntyre Well No. 1-A to be located in Unit K of Section 11, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6474: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Williams Well No. 1-A to be located in Unit C of Section 24, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6475: (Continued from May 23, 1979, Examiner Hearing)

Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Montoya Well No. 1-A to be located in Unit I of Section 35, Township 32 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6535: (Continued from June 13, 1979, Examiner Hearing)

Application of Torreon Oil Company for a waterflood project, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the San Luis-Mesaverde Pool by the injection of water into the Menefee formation through two wells located in Section 21, Township 18 North, Range 3 West, Sandoval County, New Mexico.

CASE 6579: (Continued from June 27, 1979, Examiner Hearing)

Application of R. N. Hillin for an unorthodox well location and approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of a Morrow gas well at an unorthodox location 800 feet from the South line and 2000 feet from the East line of Section 34, Township 19 South, Range 28 East, is necessary to effectively and efficiently drain that portion of the E/2 of said Section 34 which cannot be so drained by the existing well.

CASE 6580: (Continued from June 27, 1979, Examiner Hearing) (This case will be continued to the August 22 hearing.)

Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units H and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.

CASE 6270: (Continued from July 11, 1979, Examiner Hearing)

In the matter of Case 6270 being reopened pursuant to the provisions of Order No. R-5771 which order created the South Peterson-Fusselman Pool, Roosevelt County, New Mexico, and provided for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 6590: (Continued from July 11, 1979, Examiner Hearing)

Application of Grace Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying Lots 9, 10, 15, and 16 and the SE/4 of Section 6, Township 21 South, Range 32 East, to be dedicated to a well to be drilled at an unorthodox location 4650 feet from the South line and 660 feet from the East line of said Section 6. Also to be considered will be the cost of drilling and completing said well and the allocation of the costs thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

OIL CONSERVATION COMMISSION  
Hobbs DISTRICT

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE June 29, 1979

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed SWD X \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated \_\_\_\_\_  
for the Getty Oil Company (ARCO P/A) State AA No. 1-I 35-21-34  
Operator Lease and Well No. Unit, S-T-R

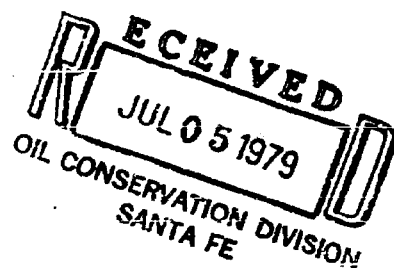
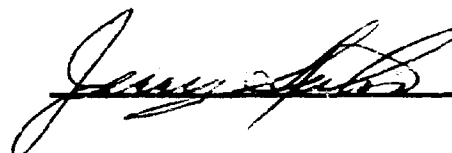
and my recommendations are as follows:

7 ~~out~~ ---J.S.

(Note Application Attached)

THIS MAY INVOLVE OUTSIDE WATER BEING DISPOSED  
OF INTO THE CAPTAN REEF

Yours very truly,



## NEW MEXICO OIL CONSERVATION COMMISSION

## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

Case 6606

OPERATOR <b>Getty Oil Company</b>		ADDRESS <b>P. O. Box 730, Hobbs, NM 88240</b>			
LEASE NAME <b>State "AA"</b>	WELL NO. <b>1</b>	FIELD <b>Unknown</b>	COUNTY <b>Lea</b>		
LOCATION UNIT LETTER <b>I</b> ; WELL IS LOCATED <b>660</b> FEET FROM THE <b>East</b> LINE AND <b>1980</b> FEET FROM THE <b>South</b> LINE, SECTION <b>35</b> TOWNSHIP <b>21S</b> RANGE <b>34</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>8 5/8"</b>	<b>240'</b>	<b>200</b>	<b>Surface</b>	<b>Circulated</b>
INTERMEDIATE					
LONG STRING (Proposed)	<b>5 1/2"</b>	<b>3810'</b>	<b>1000</b>	<b>Surface</b>	<b>Circulated</b>
TUBING <b>2 3/8"</b>			NAME, MODEL AND DEPTH OF TUBING PACKER <b>Baker "AD"-1 Tension Packer at 3750'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>Yates</b>		TOP OF FORMATION <b>3880'</b>		BOTTOM OF FORMATION <b>4160'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLES <b>Open Hole</b>		PROPOSED INTERVAL(S) OF INJECTION <b>3920-4000' and 4030-4070'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Oil and Gas</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH <b>N/A</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>200 Feet</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>None</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>10,810'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM <b>200</b>	MAXIMUM <b>1200</b>	OPEN OR CLOSED TYPE SYSTEM <b>Closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>300</b>
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 <b>Yes</b>	NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>	ARE WATER ANALYSES ATTACHED? <b>Yes, for the water to be disposed.</b>
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>State Land</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>None</b>					
<b>RECEIVED</b> <b>JUL 05 1979</b> <b>OIL CONSERVATION DIVISION</b> <b>SANTA FE</b>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER <b>No</b>		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>N/A</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAY OF AREA <b>Yes</b>		ELECTRICAL LOG <b>Yes</b>	
				THE NEW MEXICO STATE ENGINEER <b>Yes</b>	
				DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

*Alfred C. Baker* Area Superintendent 3/14/79  
(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 6606

## NEW MEXICO OIL CONSERVATION COMMISSION

## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR <b>Getty Oil Company</b>		ADDRESS <b>P. O. Box 730, Hobbs, NM 88240</b>			
LEASE NAME <b>State "AA"</b>	WELL NO. <b>1</b>	FIELD <b>Unknown</b>	COUNTY <b>Lea</b>		
LOCATION: UNIT LETTER <b>I</b> ; WELL IS LOCATED <b>660</b> FEET FROM THE <b>East</b> LINE AND <b>1980</b> FEET FROM THE <b>South</b> LINE, SECTION <b>35</b> TOWNSHIP <b>21S</b> RANGE <b>34</b> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	<b>8 5/8"</b>	<b>240'</b>	<b>200</b>	<b>Surface</b>	<b>Circulated</b>
INTERMEDIATE					
LONG STRING (Proposed)	<b>5 1/2"</b>	<b>3810'</b>	<b>1000</b>	<b>Surface</b>	<b>Circulated</b>
TUBING <b>2 3/8"</b>			NAME, MODEL AND DEPTH OF TUBING PACKER <b>Baker "AD"-1 Tension Packer at 3750'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>Yates</b>		TOP OF FORMATION <b>3880'</b>		BOTTOM OF FORMATION <b>4160'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLE? <b>Open Hole</b>		PROPOSED INTERVAL(S) OF INJECTION <b>3920-4000' and 4030-4070'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Oil and Gas</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH <b>N/A</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>200 Feet</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>None</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>10,810'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBL/DAY)	MINIMUM <b>200</b>	MAXIMUM <b>1200</b>	OPEN OR CLOSED TYPE SYSTEM <b>Closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>300</b>
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 - <b>Yes</b>			WATER TO BE DISPOSED OF <b>Yes</b>		
NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>			ARE WATER ANALYSES ATTACHED? <b>Yes, for the water to be disposed.</b>		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>State Land</b>					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>None</b>					
<b>RECEIVED</b> <b>JUL 05 1979</b>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER <b>OIL NO CONSERVATION DIVISION</b>		ANY OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>N/A</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA <b>Yes</b>		DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

*David A. [Signature]* Area Superintendent 3/14/79  
(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.





Getty Oil Company

Central Exploration and Production Division  
P. O. Box 730  
Hobbs, NM 88240

June 25, 1979

*Case 6606*

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, NM 87501

Attn: Mr. Joe Ramey

Subject: Application for Administrative Approval  
Conversion of State "AA" Well No. 1 to SWD  
Sec. 35, T-21-S, R-34-E  
Lea County, New Mexico

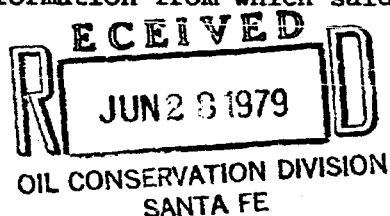
Getty Oil Company respectfully requests an administrative approval for injection of produced water in the Yates formation at the subject well as shown on attached NMOCC Form C-108 and Figure 1.

The subject well was drilled in 1956. Surface casing was set at 275 feet. It was drilled to a total depth of 4250' and plugged and abandoned (Figure 1) as a "dry hole" on November 4, 1956.

The subject well is offset by Getty operated Getty "35" State Well No. 1 as shown in Figure 2. Getty "35" State is a dual Morrow-Bone Springs completion producing an average of 3000 MCFGPD, 400 BOPD, and 400 BWPD. It is Getty's intent to utilize the State "AA" Well No. 1 for disposal of produced water from Getty "35" State Well No. 1 and other Getty operated wells in Sections 2 and 36. It is proposed to drill out all cement plugs except the bottom one, run and cement 5 1/2" casing to 3810', and dispose of produced water under a packer in the open hole interval, 3810-4080' as shown in Figure 1.

A similar water disposal application was approved by the NMOCC through Order No. R-3657 (Case No. 4015).

Attached is NMOCC Form C-108 in triplicate, a plat showing the subject well and location of all other wells within a radius of two miles, and the formation from which said wells are producing or have produced (Table I).



*Produced water within 2 mi*



Page 2  
New Mexico Oil Conservation Commission  
June 25, 1979

Also attached is a copy of a portion of Gamma Ray Neutron Log and a water analysis for the produced water to be disposed in the proposed disposal well.

A copy of this letter and attachments has been furnished to the offset operators as shown on the attached sheet.

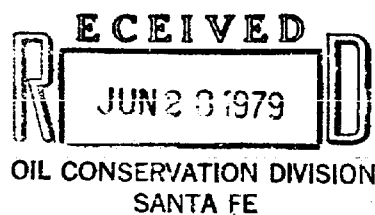
Sincerely,

*Dale R. Crockett*  
Dale R. Crockett

/MYM/de

Attachments

cc Mr. A. B. Cary-Midland



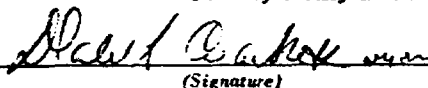
## NEW MEXICO OIL CONSERVATION COMMISSION

## APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

Case 6606

OPERATOR <b>Getty Oil Company</b>		ADDRESS <b>P. O. Box 730, Hobbs, NM 88240</b>			
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CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
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INTERMEDIATE					
LONG STRING (Proposed)	<b>5 1/2"</b>	<b>3810'</b>	<b>1000</b>	<b>Surface</b>	<b>Circulated</b>
TUBING <b>2 3/8"</b>			NAME, MODEL AND DEPTH OF TUBING PACKER <b>Baker "AD"-1 Tension Packer at 3750'</b>		
NAME OF PROPOSED INJECTION FORMATION <b>Yates</b>		TOP OF FORMATION <b>3880'</b>		BOTTOM OF FORMATION <b>4160'</b>	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? <b>Tubing</b>		PERFORATIONS OR OPEN HOLES <b>Open Hole</b>		PROPOSED INTERVAL(S) OF INJECTION <b>3920-4000' and 4030-4070'</b>	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? <b>No</b>		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? <b>Oil and Gas</b>		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? <b>No</b>	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH <b>N/A</b>					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA <b>200 Feet</b>		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA <b>None</b>		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA <b>10,810'</b>	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) <b>200</b>	MINIMUM <b>200</b>	MAXIMUM <b>1200</b>	OPEN OR CLOSED TYPE SYSTEM <b>Closed</b>	IS INJECTION TO BE BY GRAVITY OR PRESSURE? <b>Pressure</b>	APPROX. PRESSURE (PSI) <b>300</b>
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 - <b>Yes</b>			WATER TO BE DISPOSED OF <b>Yes</b>		
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) <b>State Land</b>			NATURAL WATER IN DISPOSAL ZONE <b>Yes</b>		
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL <b>None</b>			ARE WATER ANALYSES ATTACHED? <b>Yes, for the water to be disposed.</b>		
<div style="text-align: center;"><b>RECEIVED</b> <b>JUN 28 1979</b> <b>OIL CONSERVATION DIVISION</b> <b>SANTA FE</b></div>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER <b>No</b>		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL <b>N/A</b>	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA <b>Yes</b>		ELECTRICAL LOG <b>Yes</b>	
				THE NEW MEXICO STATE ENGINEER <b>Yes</b>	
				DIAGRAMMATIC SKETCH OF WELL <b>Yes</b>	

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

  
(Signature)

Area Superintendent

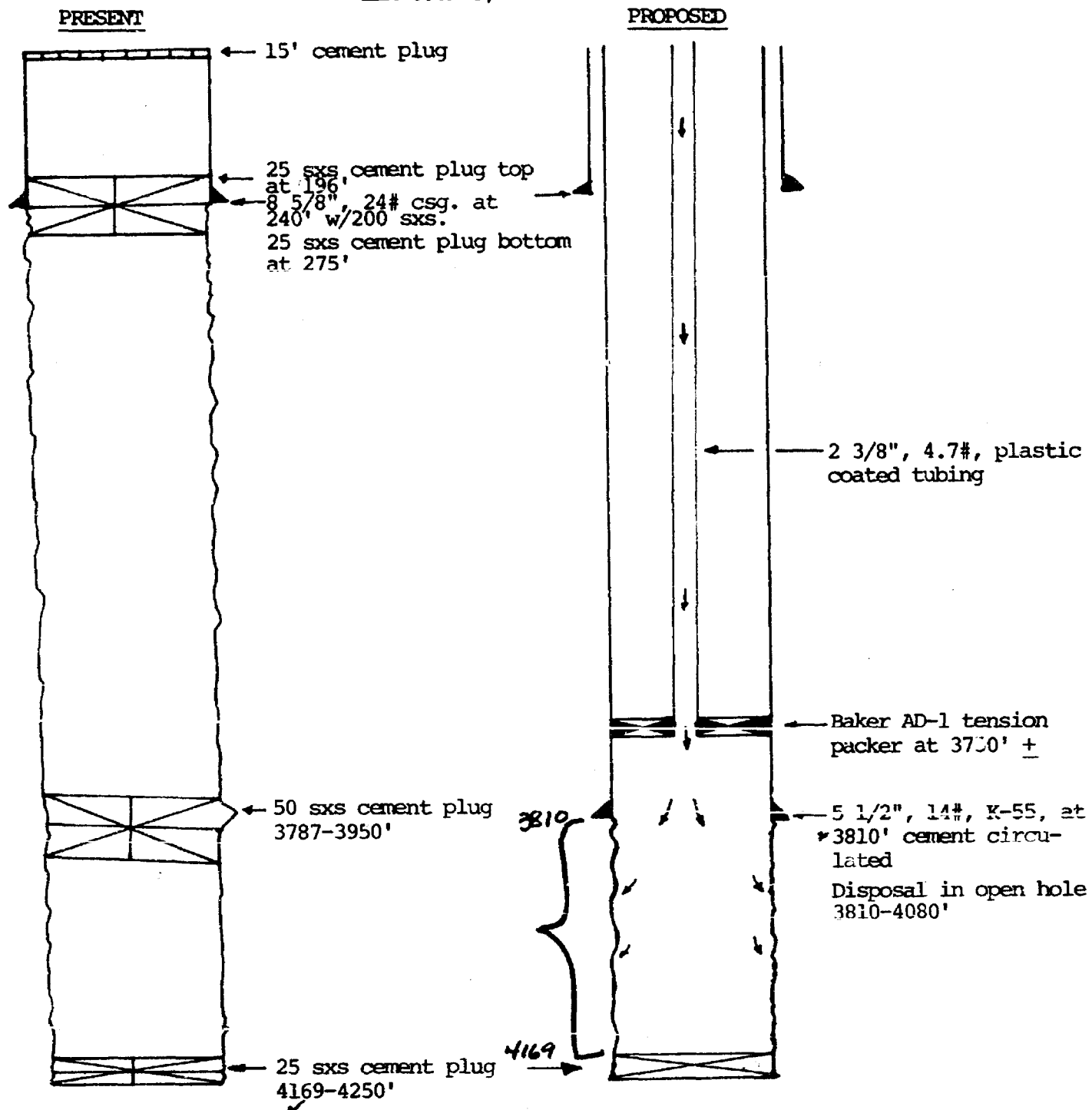
(Title)

3/14/79

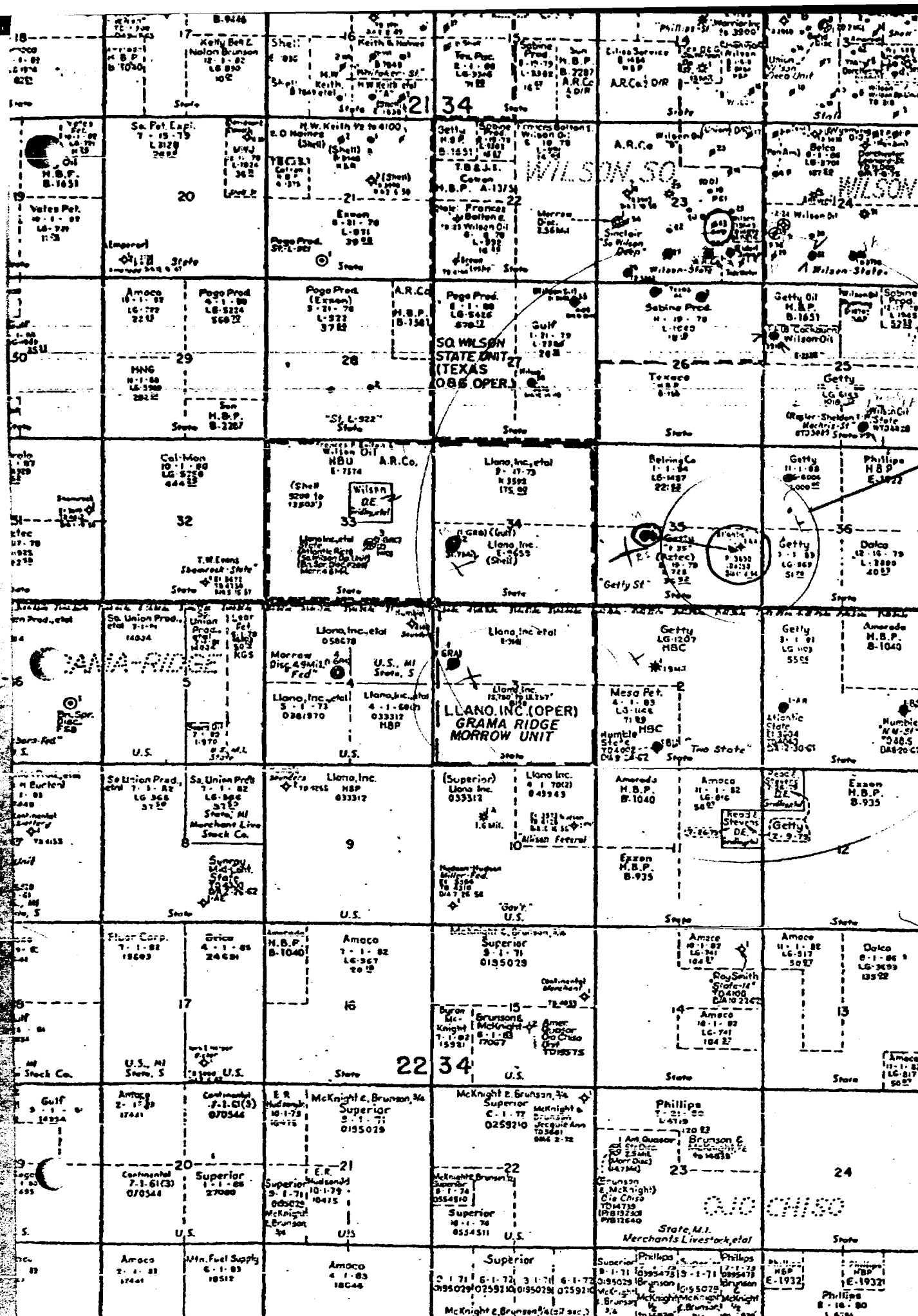
(Date)

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.

STATE "AA" WELL NO. 1  
SEC. 35, T-21-S, R-34E  
LEA COUNTY, NM



RECEIVED  
JUN 23 1979  
OIL CONSERVATION DIVISION  
SANTA FE



10th  
Sect  
R24  
S  
Yak  
River  
@ 80'

2 MI  
RADII

Figure 2

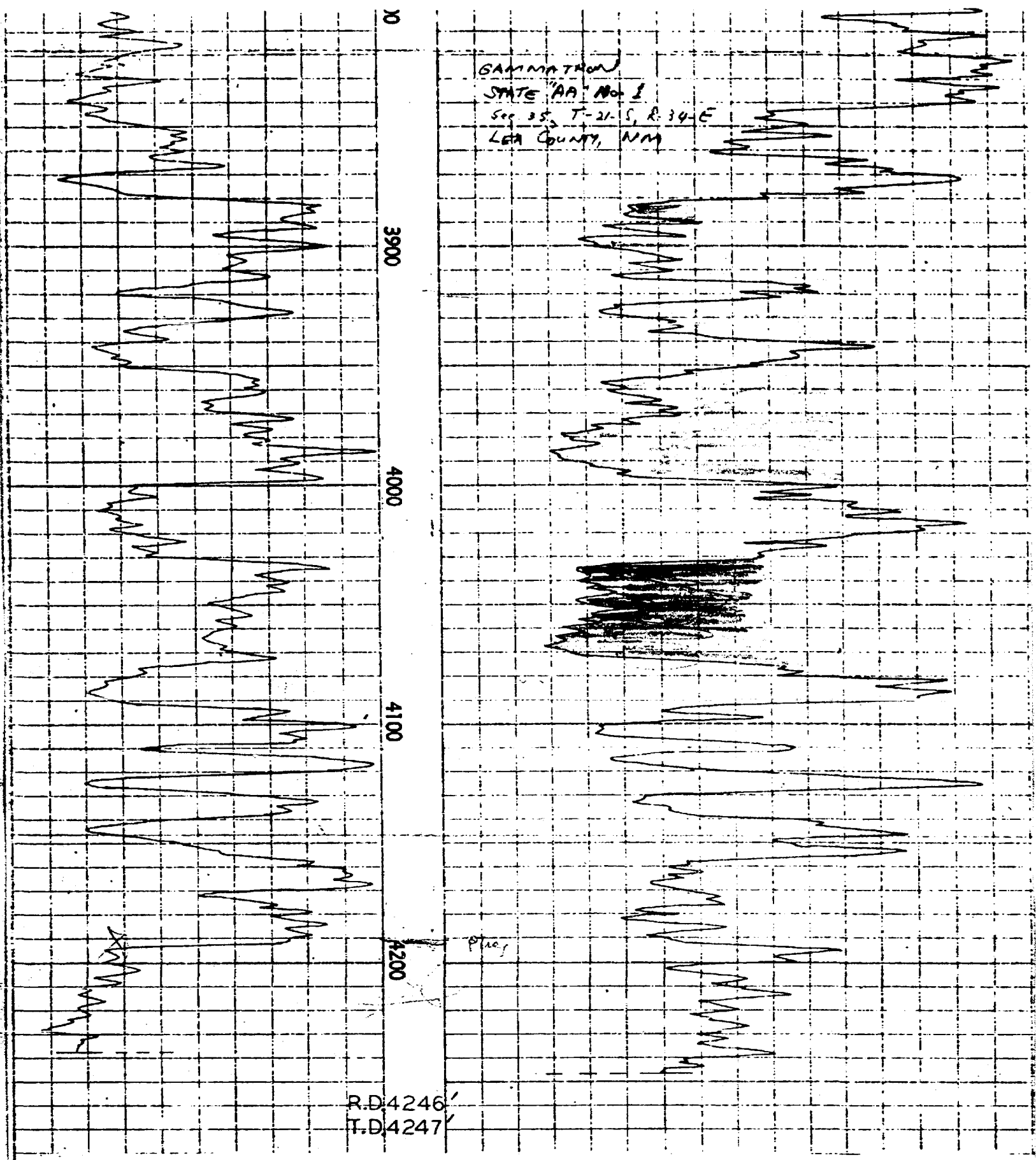
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22  
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[illegible]

TABLE I

Wilson State #26	Yates - 7 Rivers
Wilson State #27	Yates - 7 Rivers
Wilson State #28	Yates - 7 Rivers
Wilson State #32	Yates - 7 Rivers
Wilson State #33	Yates - 7 Rivers
Wilson State #35	Yates - 7 Rivers
Wilson State #36	Yates - 7 Rivers
Wilson State L #1	Yates - 7 Rivers
Texas Co. State AC #1	Yates - 7 Rivers
Texas Co. State AC #2	Yates - 7 Rivers
Humble State "BV" #1	Yates - 7 Rivers
Humble State "BS" #1	Yates - 7 Rivers
Atlantic Rfg. Co. State "AR" #1	Yates - 7 Rivers
Getty 35 State #1	Bone Springs, Morrow
Getty Two State #1	Morrow
Llano 3 State #1	Gramma Ridge Morrow
Llano 34 State #2	Morrow

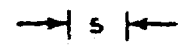
GAMMATHON  
STATE "AA" No. 1  
Sec. 35, T-21-S, R-34-E  
LEA County, NM



DETAIL SECTION BELOW

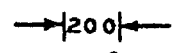
GAMMA RAY

RADIATION UNITS



NEUTRON

ENVIRONMENTAL UNITS







Home Office 707 N. Leech, P. O. Box 1499 / Hobbs, NM 88240 / Ph. 505/393-7751, TWX 910/986-0010

Company Getty Oil Company

Field Wolfcamp

Lease Getty 35 State #1

Sampling Date 2-5-79

Type of Sample Wellhead

#### WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	230.00	4,600
Magnesium (Mg++)	250.00	3,000
Sodium (Na+) (CALCULATED)	2020.10	46,442
Iron (Total)		3.8
Bicarbonate (HCO <sub>3</sub> -)	6.00	366
Carbonate (CO <sub>3</sub> -)	Not	Found
Hydroxide (OH-)	Not	Found
Sulphate (SO <sub>4</sub> -)	40.70	1,955
Chloride (Cl-)	2453.40	87,000
Total Dissolved Solids		143,363
6.0 pH c 68 °F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO <sub>3</sub>	480.00	24,000
Carbonate Hardness as CaCO <sub>3</sub> (temporary)	6.00	300
Non-Carbonate Hardness as CaCO <sub>3</sub> (permanent)	474.00	23,700
Alkalinity as CaCO <sub>3</sub>	6.00	300
Specific Gravity c 68° F 1.100		

\* mg/l = milligrams per Liter

\* me/l = milliequivalents per Liter

CaCO<sub>3</sub> S.I. negative (0.36)

CaSO<sub>4</sub> S.I. negative (1.11)



ROUGH

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6606

Order No. R- 6080

APPLICATION OF GETTY OIL COMPANY  
FOR SALT WATER DISPOSAL, LEA  
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 25  
19 79, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter  
NOW, on this \_\_\_\_\_ day of \_\_\_\_\_, 19 79, the Division  
Director, 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 Division has jurisdiction of this cause and the subject  
matter thereof.

(2) That the applicant, Getty Oil Company,  
is the owner and operator of the State "AA" Well No. 1,  
located in Unit I of Section 35, Township 21 South,  
Range 34 East, NMPM, East Krama Ridge Field,  
Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the Yates  
formation, with injection into the open-hole  
interval from approximately 3810 feet to 4169 feet.

(4) That the injection should be accomplished through 2 3/8  
-inch plastic lined tubing installed in a packer set at approxi-  
mately 3750 feet; that the casing-tubing annulus should be  
filled with an inert fluid; and that a pressure gauge or approved  
leak detection device should be attached to the annulus in order

to determine leakage in the casing, tubing, or packer.

(5) That the injection well or system should be equipped with a <sup>pressure regulator</sup> ~~pop-off valve~~ or acceptable <sup>other</sup> ~~substitute~~ <sup>device</sup> which will limit the wellhead pressure on the injection well to no more than 750 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) 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, Getty Oil Company is hereby authorized to utilize its State "AA" Well No. 1 located in Unit I of Section 35, Township 21 South Range 34 East, NMPM, East Grama Ridge Field, Lea County, New Mexico, to dispose of produced salt water into the Yates formation, injection to be accomplished through 2 3/8 -inch tubing installed in a packer set at approximately 3750 feet, with injection into the open-hole interval from approximately 3810 feet to 4169 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 shall be equipped with an approved leak detection device in order to determine leakage in the casing, tubing, or packer.

(2) That the injection well or system shall be equipped with a <sup>Pressure regulator</sup> ~~pop-off~~ <sup>other</sup> ~~valve~~ <sup>device</sup> or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 750 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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

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

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