

CASE 3948: Application of SINCLAIR
OIL CORP. FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

Case Number

3948

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

EXAMINER HEARING

IN THE MATTER OF:)

Application of Sinclair Oil)
Corporation for salt water disposal,)
Lea County, New Mexico.)

Case No. 3948

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 3948.

MR. HATCH: Case 3948. Application of Sinclair Oil Corporation for salt water disposal, Lea County, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch and Kelly, Santa Fe on behalf of the applicant. I have one witness and ask that he be sworn.

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

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 5 were marked for identification.)

R. M. ANDERSON

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

DIRECT EXAMINATION

BY MR. KELLY:

Q Please state your name, position and employer?

A R. M. Anderson, Region Regulatory Engineer, Sinclair Oil Corporation, Midland, Texas.

Q And for the record you have previously qualified as an expert witness before this Commission?

A Yes, I have.

Q Referring to what has been marked Exhibit No. 1, would you state briefly what Sinclair seeks by this application?

A Exhibit No. 1 is an area map in the vicinity of the West Teas Field, Lea County, New Mexico. The proposed salt water disposal well is the northern most well of -- just north of the green circles. The green circles on the map represent wells that are classified in the West Teas Field, the red circles on the map identify wells that are in the Teas Field and the yellow circles represent Teas Bones Spring Well, but the only produced water that is affected by this application is water that is produced from the West Teas Field which is the area of the green circles. There are eight wells in the West Teas Field.

Q This is a joint project, I assume, then of other companies?

A Yes. All companies in the West Teas Field are cooperating in the project and are contributing their water for disposal in subject well.

Q Who are the companies involved?

A City Service Oil Company has two wells, Ernest A. Hanson has one well, Charles B. Reed has one well and Sinclair Oil Corporation has four wells.

Q So, the water will be injected into the same formation that it is produced from, is that right?

A Yes, it will be returned to the same formation into a well that was drilled as a dry hole and found the pay zone below the oil-water contact.

Q Now, on Exhibit 1, have you shown all production wells within a two-mile radius?

A Yes, sir.

Q Now, referring to what has been marked as Exhibit No. 2, would you give a history of this well and the pertinent pressure data and injection data?

A Exhibit No. 2 is the Commission Form C108, contains all of the pertinent data concerning the well. We can talk about the well equipment and installation when we get to the next exhibit. This exhibit reflects that we have a minimum of 100 barrels of water a day to dispose of; that's the current water production and I estimate a maximum of maybe as much as 300 barrels of water per day. We are going to use a close system. We are hoping that the water will go in by gravity. The perforations that we are going to put the water into, swabbed the rate of about 300 barrels per day when we attempted to complete the well, so it's expected that the well will take this water by gravity.

However, we are asking for permission to use as much pressure as the equipment we are going to install will have capacity to provide, which is 1550 pounds. In my opinion, we will never need that much pressure.

Q The injection well, you say, was never on production, it was a dry hole?

A Yes, sir, completed as a dry hole.

Q Now, referring to what has been marked Exhibit No. 3, your sketch of the proposed installation, will you explain that to the Examiner?

A Yes. Exhibit 3 is a sketch of the proposed installation. At present this well is plugged and abandoned. However, the five inch liner, 7 inch production casing and the 9 and five-eighths surface casing is in tact in the well. It will be a simple matter to re-enter the well and clean out the cement plugs that have been spotted in the well board and convert the well to an injection well. I might comment that the 9 and five-eighths inch surface casing was set with 734 sacks of cement and cement was circulated to the surface. The 7 inch was cemented with 474 sacks and temperature survey reflected the top of the cement at 200 feet as shown on my sketch. However, upon learning about this at the time the well was

drilled, Sinclair ran a one inch stinger down in the annulus and filled the annulus back to the surface with cement, so there is cement to the surface behind the 7 inch.

Q You are going to have plastic coated tubing?

A Yes.

Q Now, is there any fresh water in the area?

A There is a small amount of fresh water of varying quality. I don't believe that it is very good quality and it's -- the shallow fresh water within 100 feet of the surface is very scarce and unpredictable in this area.

Q Now, this is in a potash zone, isn't it?

A Yes, this is in a designated potash area which contains, I am advised, uneconomical potash deposits. Referring back to Exhibit 1 the area map there is a heavy dashed line that -- two lines that run across the map from west to east and the area between those lines is area within designated potash area and we see that all of these wells in this field are within that area; however, several of the wells with -- the two wells, with the dry hole and the producing wells in the southeast quarter of Section 16 were drilled with casing potash area casing rule

exceptions as result of potash companies indicating they had no interest in mining in that area, so the area is not a possible potash area at this time.

Q How about other oil production of your corporation?

A And I might add that the proposed injection well was drilled in full accordance with the potash rules and even if the potash deposits were commercial, this well satisfies the requirements of the potash order. There are no oil or gas zones above the proposed injection interval.

Q In your opinion, this proposed sketch will protect any fresh water and any possible potash in the area?

A Yes, with two strings of casing cemented to the surface in this manner I believe that both the potash and fresh water will be adequately protected.

Q Now, referring to what has been marked as Exhibit No. 4, your structure map, will you explain this exhibit to the Examiner?

A Yes. I would like to make one other comment before we leave Exhibit 3. We will fill the casing tubing annulus with corrosion inhibited fluid and provide for fresher observation at the surface.

Q Go to Exhibit No. 4.

A Exhibit 4 is a structure map on the top of the Yates in this area and it reflects that the proposed injection well, which is in Unit O of Section 9, the proposed injection well is the lowest well in the field and indicates it structurally where the -- just where we are going to be disposing of this water. The water incidentally which is coming out of the same Yates formation.

Q Now, you have submitted Exhibit No. 5 which is a log, have you not?

A Yes. Exhibit No. 5, I have marked the completion information on Exhibit No. 5. I have put the Yates top at Sub C, plus 536 C and that is the same marker that is used on the large map. The perforations that I have indicated on Exhibit 5 that are filled in in solid have been squeezed in the original attempt to complete the well and the perforations that are now open are also shown and they are shown as open perforations on the Exhibit 5. I also show the plugged back TD and we are asking for permission to put the water in the perforations that are shown here as being open and possibly if necessary to clean out the cement plug in the bottom of the well and to look for additional porosity. We would like to have that approval; also whenever we can get the water into the

Yates and Seven Rivers in this well, we want full authority to do.

Q All perforations will be in the Yates-Seven Rivers?

A Oh yes, yes.

Q In your opinion would the granting of this application have any adverse affect on the correlative rights of other operators in the area?

A No, in my opinion it will have a rather beneficial affect on the correlative rights in that it will permit them to continue to produce oil after the January 1st no-pit deadline.

Q Were Exhibits one through five prepared by you or under your supervision?

A Yes.

Q We move the introduction of Applicant's Exhibits one through five at this time.

MR. UTZ: Without objection, Exhibits one through five will be entered in the record of this case.

MR. KELLY: I have nothing further on direct, Mr. Examiner.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Anderson, if I understand you correctly, you want approval for injection into other zones other than the perforations shown on Exhibit No. 3?

A Yes, I would like approval to inject into all zones that were penetrated by this well below the -- of course, below the Yates top. The well was drilled to a total depth of 3302 and I would like approval to use any zones that we might find in the present well board for disposal. Initially, we will attempt to use the perforations that are open which are the ones shown on Exhibit 5.

Q If you were to clean out from 3240 to 3300, you would have to re-perforate that, is that correct?

A Yes.

Q So, you would inject through perforations in that interval?

A Yes, sir.

Q How salty is this water in this area?

A The produced water?

Q Yes.

A I don't know how salty it is. I do know that it is not potable and we considered asking for possibly permission to continue to use the pits instead of going to this

disposal well; however, it was decided that the water produced in this field was too salty and that this would be the best program. I don't know how bad it is. It's not fit for use.

MR. UTZ: Other questions of the witness? He may be excused. We will take the case under advisement.

(Witness excused.)

I N D E XWITNESSPAGE

R. M. ANDERSON

Direct Examination by Mr. Kelly

2

Cross Examination by Mr. Utz

10

EXHIBITMARKEDOFFERED AND
ADMITTEDApplicant's 1
through 5

2

9

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

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

Witness my Hand this 22nd day of November, 1968.

Glenda Burks
 COURT REPORTER

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Executive hearing of Case No. 3948
 heard by me on Nov 20 1968
Glenda Burks Reporter
 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. Booker Kelly
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: Case No. 3948
Order No. R-3588
Applicant:
Sinclair Oil Corporation

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. 3948
Order No. R-3598

APPLICATION OF SINCLAIR OIL CORPORATION
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, Sinclair Oil Corporation, is the owner and operator of the Lease 6015 ARC Federal Well No. 1, located in Unit O of Section 9, Township 20 South, Range 33 East, NMPM, West Tens Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the Yates and Seven Rivers formations, with injection into the perforated and open-hole interval from approximately 3110 feet to 3300 feet.

(4) That the injection should be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3070 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

-2-

CASE No. 3948
Order No. R-3588

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:

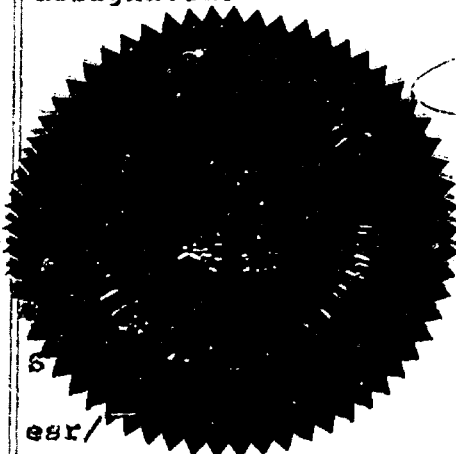
(1) That the applicant, Sinclair Oil Corporation, is hereby authorized to utilize its Lease 6015 ARC Federal Well No. 1, located in Unit O of Section 9, Township 20 South, Range 33 East, NMPM, West Teas Pcol, Lea County, New Mexico, to dispose of produced salt water into the Yates and Seven Rivers formations, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3070 feet, with injection into the perforated and open-hole interval from approximately 3110 feet to 3300 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 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

esr/

Case 3848

Heard 11-20-68

Rec. 11-21-68

Grant Sinclair's permission to
convert their Lease 6015 A RC Dec. #1
0-9-205-33E. to an SWP well. Injection
shall be thru 2 3/8 internally plaster
coated tubing - under a packer -
thru pipe from 3110-3214 & open
hole 3240-3300 into the Yates
& S.R. fm. of West Texas - Yates - SA
pool. Well is in 40 ac. offset to
above pool.

Thistle. W
Annulus to be filled with cement
fluid & pressure gauge at surface.
- Da

NOTE: THIS HEARING WILL START AT 8:30 a.m. rather than the usual hour of 9:00 a.m.

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 20, 1958

8:30 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

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

CASE 3946: Application of Coastal States Gas Producing Company for the redesignation of the Baum-Upper Pennsylvanian and Lazy J-Pennsylvanian Pools, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the extension of the Baum-Upper Pennsylvanian Pool to include the following described lands:

Township 13 South, Range 33 East, Lea County, New Mexico

Section 19: SE/4
Section 20: SW/4 and E/2
Section 21: SW/4
Section 29: All
Section 30: E/2
Section 31: N/2
Section 32: N/2 and SE/4

Township 14 South, Range 33 East, Lea County, New Mexico

Section 5: SE/4
Section 8: NE/4

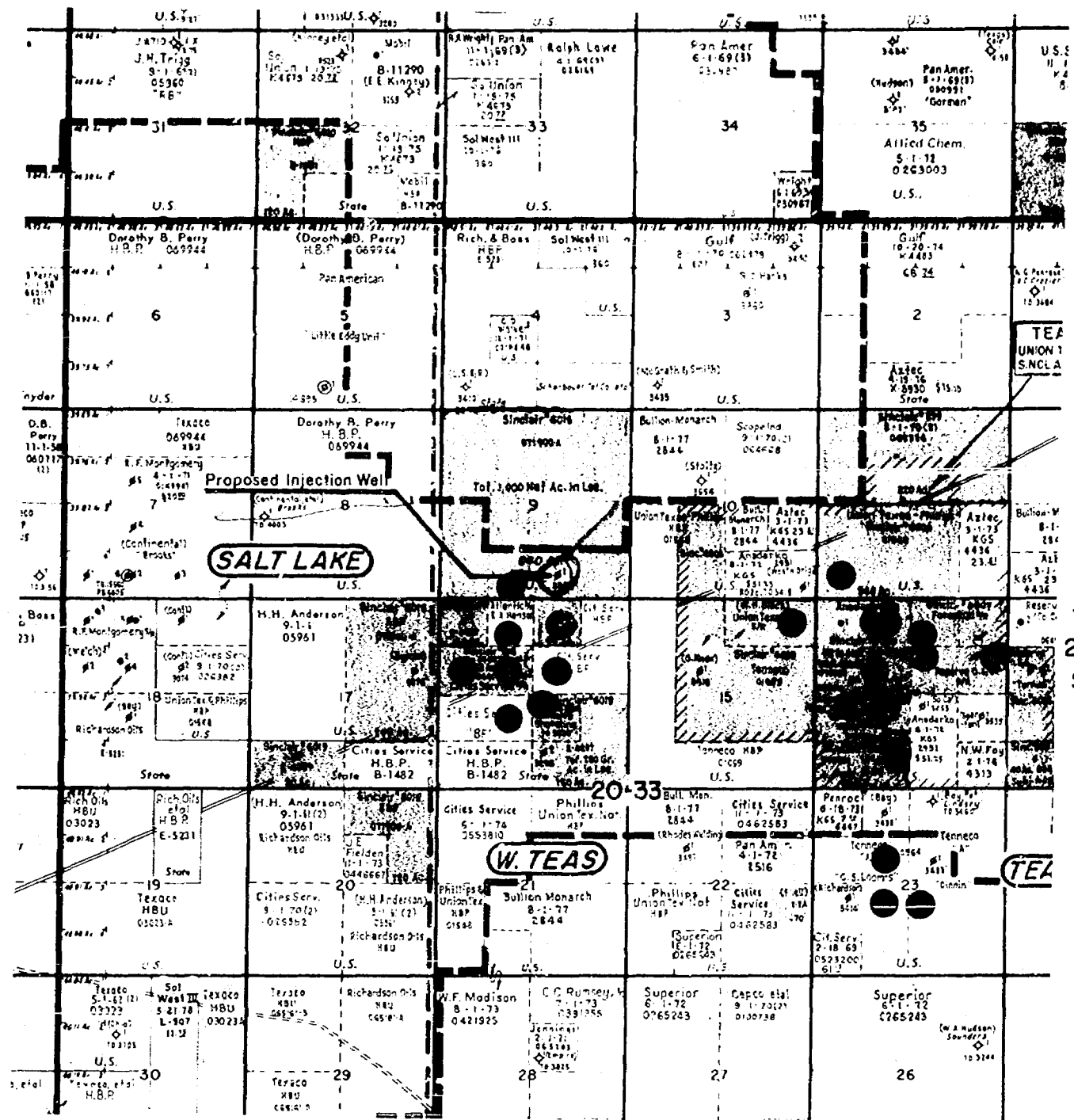
Applicant further seeks the contraction of the Lazy J-Pennsylvanian Pool by the deletion from said pool of the E/2 of Section 20 and the SE/4 and W/2 of Section 21, both in Township 13 South, Range 33 East, Lea County, New Mexico.

CASE 3947: Application of Skelly Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through its E. L. Steeler Well No. 6 located in Unit J of Section 17, Township 23 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 3948: Application of Sinclair Oil Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates and Seven Rivers formations in the perforated and open-hole interval from approximately 3110 feet to 3300 feet in its

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 I 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



LEGEND

- TEAS BONE SPRINGS
- TEAS YATES SEVEN RIVERS
- TEAS YATES SEVEN RIVERS WEST

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
SINCLAIR EXHIBIT NO. 1
CASE NO. 3948

SINCLAIR OIL CORPORATION
MIDLAND, TEXAS
PART OF
LEA COUNTY, NEW MEXICO
R.M.D.
DRAWN BY JW CHECKED BY JWH DATE 10-28-68
SCALE - 1" = 4000' REVISED

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

OPERATOR Sinclair Oil Corporation		ADDRESS P.O. Box 1470, Midland, Texas 79701			
LEASE NAME Lea 6015 ARC Federal	WELL NO. 1	FIELD West Teas	COUNTY Lea		
LOCATION UNIT LETTER 0 ; WELL IS LOCATED 660 FEET FROM THE South LINE AND 1980 FEET FROM THE East LINE, SECTION 9 TOWNSHIP 20S RANGE 33E NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	9 5/8"OD	1357'	734 sx	Surface	Circulated
INTERMEDIATE	7"OD	3022'	474 sx	Surface	Circulated
LONG STRING	5"OD	3132'	50 sx	2974'	Circulated
TUBING	2 3/8"OD	3070'	NAME, MODEL AND DEPTH OF TUBING PACKER Tension Packer		
NAME OF PROPOSED INJECTION FORMATION Yates Seven Rivers		TOP OF FORMATION 3000'		BOTTOM OF FORMATION TD in Seven Rivers	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN END? Perforations		PROPOSED INTERVAL(S) OF INJECTION 3110 to 3300 (TD)	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No - Dry Hole		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil		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 3199 to 3264 (May be reperforated if needed)					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 1357'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None in well		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None in well	
ANTICIPATED DAILY INJECTION VOLUME (BBL/DAY)	MINIMUM 100	MAXIMUM 300	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 1550
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) United States Dept. of Interior-USGS Drawer "U", Artesia, New Mexico - Attn: Mr. James A. Knauf					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
<div style="border: 2px solid black; padding: 10px; text-align: center;">BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION SINCLAIR EXHIBIT NO. <u>2</u> CASE NO. <u>3948</u></div>					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER No		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL No	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA Yes		ELECTRICAL LOG 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.

COPY original signed **R. M. ANDERSON**

Region Regulatory Engineer

10-28-68

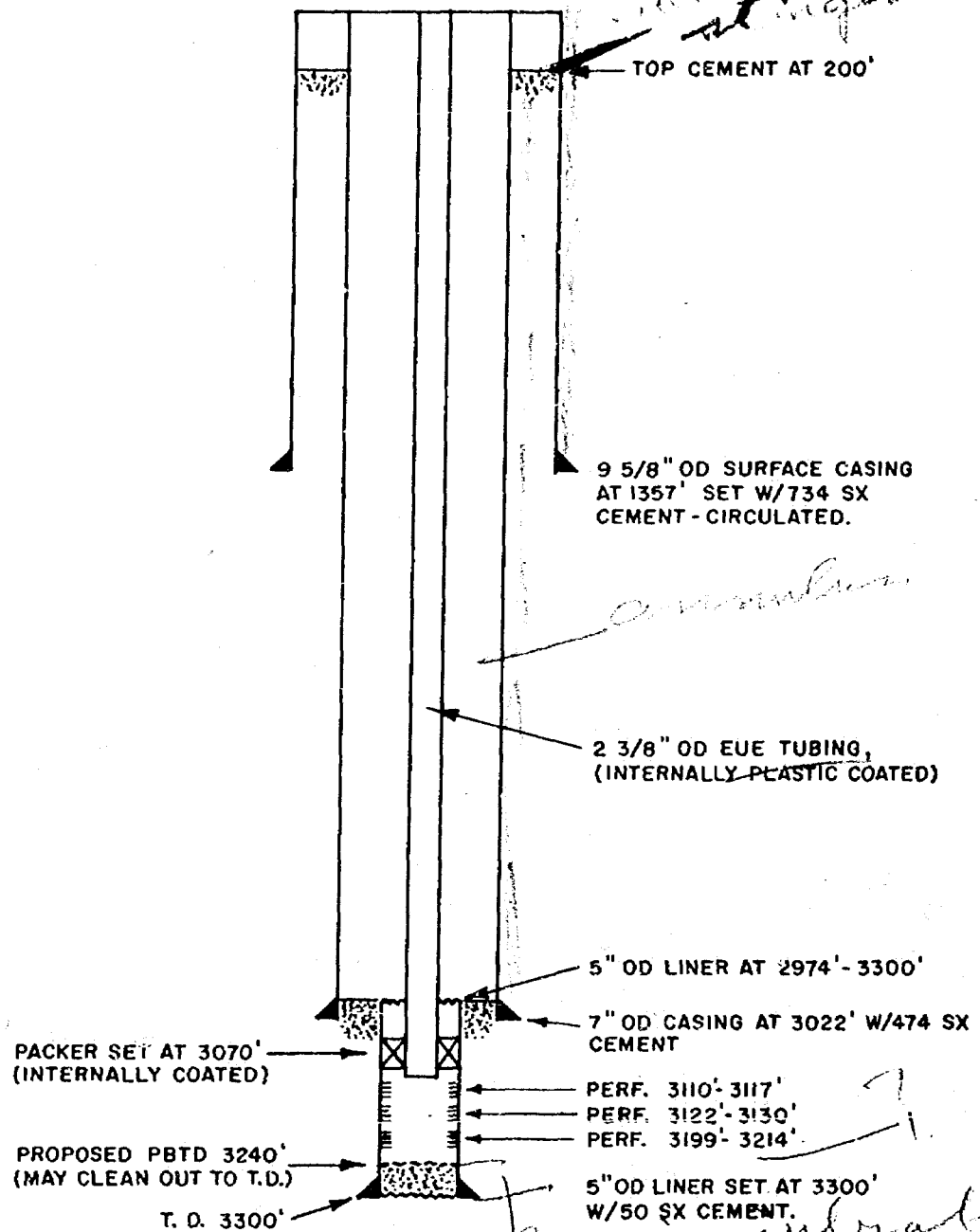
(Signature)

(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.

DIAGRAMMETIC SKETCH OF
PROPOSED INSTALLATION



SINCLAIR OIL CORPORATION
LEA 6015 ARC FEDERAL NO. 1
WEST TEAS POOL.
660' FSL & 1980' FEL, SECTION 9, T-20-S
LEA COUNTY, NEW MEXICO.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
SINCLAIR EXHIBIT NO. 3
CASE NO. 3948



SINCLAIR OIL CORPORATION

P. O. Box 1470
MIDLAND, TEXAS 79701
October 28, 1968

MAIL OFFICE 009
OCT 30 AM 8 37

SOUTHERN REGION (WEST TEXAS)
DOMESTIC OIL & GAS DIVISION

cc 3948

New Mexico Oil Conservation Commission
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Gentlemen:

Sinclair Oil Corporation, operator of the West Teas Salt Water Disposal System, hereby makes application for a hearing to permit the disposal of Field Wide Produced salt water into its Lea 6015 ARC Federal well No. 1, a dry hole, located in Section 9, T-20S, R-33E, West Teas field, Lea County, New Mexico. This lease as well as all other leases within two miles are shown on the attached area plat. Also enclosed please find:

1. Electric log on Lea 6015 ARC Federal Well No. 1.
2. A diagrammatic sketch of the proposed salt water disposal well showing all casing strings, diameters, setting depth, cement quantities, tops and producing intervals, tubing size, length, type packer and setting depth.
3. A plat of the area showing the oil and/or gas pool each well in the immediate vicinity is completed in.
4. Injection will be into the Yates Seven Rivers formation in the West Teas field. Produced salt water will be injected 100-300 barrels per day at a maximum pressure of 1550 psi.
5. Form C-108

Very truly yours,

R. M. Anderson
Region Regulatory Engineer

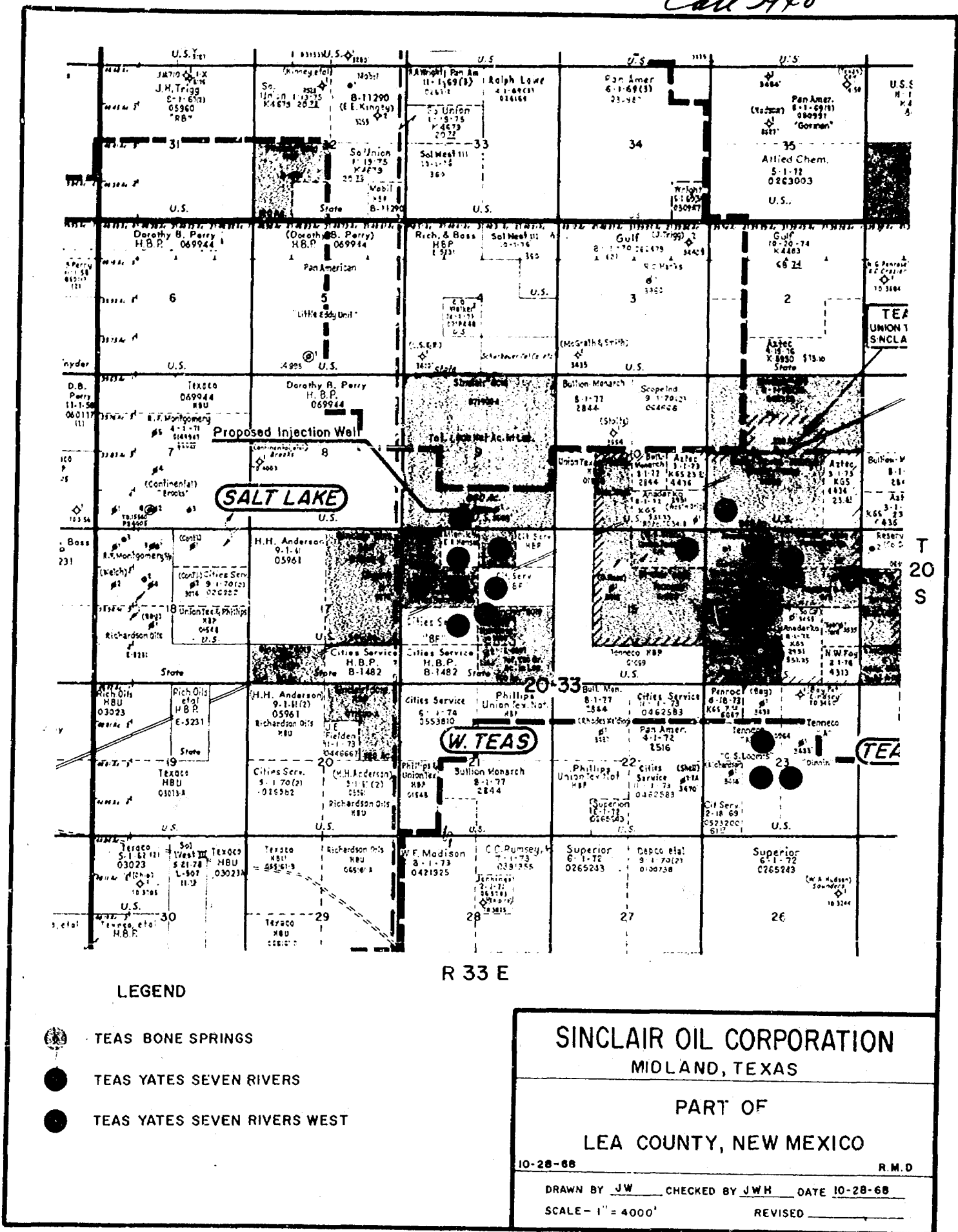
RMD:occ
enclosures
cc: HNB

White, Guilbert, Koch & Kelly
P. O. Box 787, Santa Fe, New Mexico 87501

DOCKET MAILED

Date 11-7-68

Case 3948



NEW MEXICO OIL CONSERVATION COMMISSION

OPERATOR Sinclair Oil Corporation		ADDRESS P.O. Box 1470, Midland, Texas 79701			
LEASE NAME Lea 6015 ARC Federal	WELL NO. 1	FIELD West Teas	COUNTY Lea		
LOCATION UNIT LETTER <u>0</u> ; WELL IS LOCATED <u>660</u> FEET FROM THE <u>South</u> LINE AND <u>1980</u> FEET FROM THE <u>East</u> LINE, SECTION <u>9</u> TOWNSHIP <u>20S</u> RANGE <u>33E</u> NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	9 5/8"OD	1357'	734 sx	Surface	Circulated
INTERMEDIATE	7"OD	3022'	474 sx	Surface	Circulated
LONG STRING	5"OD	3132'	50 sx	2974'	Circulated
TUBING	2 3/8"OD	3070'	NAME, MODEL AND DEPTH OF TUBING PACKER Tension Packer		
NAME OF PROPOSED INJECTION FORMATION Yates Seven Rivers		TOP OF FORMATION 3000'		BOTTOM OF FORMATION TD in Seven Rivers	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforations		PROPOSED INTERVAL(S) OF INJECTION 3110 to 3300 (TD)	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No - Dry Hole		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil		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 3199 to 3264 (May be reperforated if needed)					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 1357'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None in well		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None in well	
ANTICIPATED DAILY INJECTION VOLUME (BBLs.)	MINIMUM 100	MAXIMUM 300	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 1550
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) United States Dept. of Interior-USGS Drawer "U", Artesia, New Mexico - Attn: Mr. James A. Knauf					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER No		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL No	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

I hereby certify that the

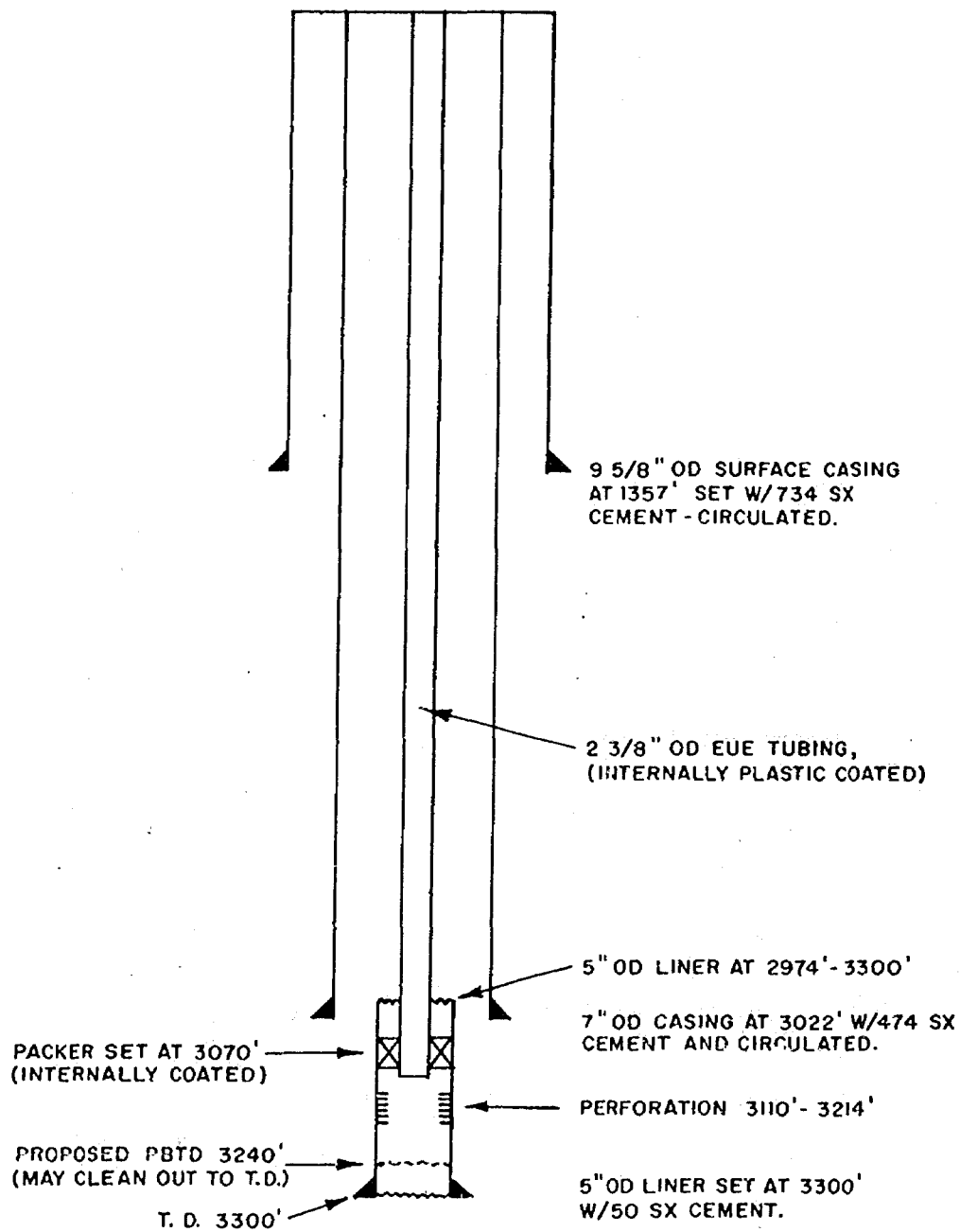
 (Signature)

10-28-68

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.

CEU 3948

DIAGRAMMETIC SKETCH OF
PROPOSED INSTALLATION



SINCLAIR OIL CORPORATION
LEA 6015 ARC FEDERAL NO. 1
WEST TEXAS POOL
660' FSL & 1980' FEL, SECTION 9, T-20-S R-33-E
LEA COUNTY, NEW MEXICO.

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:

COPY of order
to USBLM

CASE No. 3948

Order No. R- 3588

APPROVED
A.P.

APPLICATION OF SINCLAIR OIL CORPORATION
FOR SALT WATER DISPOSAL, LEA COUNTY, NEW
MEXICO.

21-68

ORDER OF THE COMMISSION

BY THE COMMISSION:

8:30

This cause came on for hearing at 8 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, Sinclair Oil Corporation,
is the owner and operator of the Lease 6015 ARC Federal Well No. 1,
located in Unit 0 of Section 9, Township 20 South, Range
33 East, NMPM, West Teas Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the Yates and Seven Rivers
formation, with injection into the perforated
and open-hole interval
from approximately 3110 feet to 3300 feet.

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

approximately 3070 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, Sinclair Oil Corporation, is hereby authorized to utilize its Lease 6015 ARC Federal Well No. 1, located in Unit 0 of Section 9, Township 20 South, Range 33 East, NMPM, West Teas Pool, Lea County, New Mexico, to dispose of produced salt water into the Yates and Seven Rivers formations, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3070 feet, with injection into the open-hole interval from approximately 3110 feet to 3300 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 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.