

CASE 3803: Application of GULF  
OIL CORP. FOR AN AMENDMENT TO  
ORDER NO. R-3345, Lea County.

Case Number

3803

---

Application  
Transcripts.

Small Exhibits

ETC.

State of New Mexico  
Oil Conservation Commission



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

September 9, 1968

Re: Case No. 3803  
Order No. R-3345-C  
Applicant:  
**Gulf Oil Corporation**

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

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

Carbon copy of order also sent to:

Other \_\_\_\_\_

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

September 11, 1968

Mr. Bill Kastler  
Gulf Oil Company - U. S.  
Post Office Box 1938  
Roswell, New Mexico 88201

Dear Mr. Kastler:

Reference is made to Commission Order No. R-3345-C, recently entered in Case No. 3803 approving the revision of the injection pattern in your Gulf Stuart Langlie Mattix Waterflood Project.

Additional injection is to be into the seven newly authorized wells, three of which are conversions from producing wells, and four of which will be newly drilled. Injection into all shall be through internally plastic-coated tubing which shall be set in a packer within 100 feet of the uppermost perforation or in the case of open-hole completions, within 100 feet of the casing shoe. Each of the four injection wells to be newly drilled shall have surface casing set at least to the base of the Rustler formation and cement circulated.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 1064 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

-2-

Mr. Bill Kastler  
Gulf Oil Company - U. S.  
Post Office Box 1938  
Roswell, New Mexico 88201

of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSH/ix

Oil Conservation Commission  
Hobbs, New Mexico

Mr. D. E. Gray, State Engineer Office,  
Santa Fe, New Mexico

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. 3803  
Order No. R-3345-C

APPLICATION OF GULF OIL CORPORATION  
FOR AN AMENDMENT TO ORDER NO. R-3345,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 7, 1968,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 9th day of September, 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 Order No. R-3345, as corrected by No. R-3345-A and  
amended by No. R-3345-B, authorized the applicant, Gulf Oil Corpo-  
ration, to institute the Gulf Stuart Langlie Mattix Waterflood  
Project in the Stuart Langlie Mattix Unit Area, Langlie-Mattix  
Pool, by the injection of water into the Seven Rivers and Queen  
formations, Lea County, New Mexico.

(3) That the applicant, Gulf Oil Corporation, now seeks  
amendment of Order No. R-3345, as corrected by No. R-3345-A and  
amended by No. R-3345-B, to delete the following-described water  
injection wells in Township 25 South, Range 37 East, NMPM, Lea  
County, New Mexico, previously authorized therein:

-2-

CASE No. 3803

Order No. R-3345-C

<u>LEASE</u>	<u>WELL NO.</u>	<u>UNIT</u>	<u>SECTION</u>
Richmond State "A"	2	M	2
Gulf Stuart	5	A	10
Gulf Stuart	7	C	10
Sinclair Stuart "B"	2	I	10
Union Texas Stuart "B"	4	C	11

and to authorize for water injection four new wells to be drilled at the following unorthodox locations in Section 10, Township 25 South, Range 37 East, NMPH, Lea County, New Mexico:

A well 100 feet from the North line and 1650 feet from the West line;

A well 100 feet from the North line and 660 feet from the East line;

A well 1315 feet from the North line and 100 feet from the West line; and

A well 1420 feet from the South line and 100 feet from the East line;

and the conversion to water injection of three additional wells located in said Township and Range as follows:

Richmond Drilling State "A" Well No. 3, located in Unit H of Section 2;

Skelly Oil State "L" Well No. 2, located in Unit F of Section 2; and

Union Texas Stuart "B" Well No. 5, located in Unit F of Section 11.

(4) That approval of the subject application will not violate correlative rights and should increase the efficiency of the Gulf Stuart Langlie Mattix Waterflood Project and result in greater ultimate recovery of oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order No. R-3345, as corrected by No. R-3345-A and amended by No. R-3345-B, is hereby amended by deleting from the

-3-

CASE No. 3803

Order No. R-3345-C

water injection wells authorized therein the following-described wells in Township 25 South, Range 37 East, NMPM, Lea County, New Mexico:

<u>LEASE</u>	<u>WELL NO.</u>	<u>UNIT</u>	<u>SECTION</u>
Richmond State "A"	2	M	2
Gulf Stuart	5	A	10
Gulf Stuart	7	C	10
Sinclair Stuart "B"	2	I	10
Union Texas Stuart "B"	4	C	11

and substituting in lieu thereof as water injection wells the following-described wells to be drilled at unorthodox locations in said Township and Range:

A well 100 feet from the North line and 1650 feet from the West line;

A well 100 feet from the North line and 660 feet from the East line;

A well 1315 feet from the North line and 100 feet from the West line; and

A well 1420 feet from the South line and 100 feet from the East line;

and the addition of the following three wells to be converted to water injection located in said Township and Range:

Richmond Drilling State "A" Well No. 3, located in Unit M of Section 2;

Skelly Oil State "L" Well No. 2, located in Unit F of Section 2; and

Union Texas Stuart "B" Well No. 5, located in Unit F of Section 11.

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



-4-

CASE No. 3803

Order No. R-3345-C

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

*Gordon B. Hays*  
GORDON B. HAYS, Member

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

esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 7, 1968

9 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. Nutter, Alternate Examiner:

CASE 3778: (Continued from the June 5, 1968 Examiner Hearing)

Application of Atlantic Richfield Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its State BH Well No. 1 located 660 feet from the North and West lines of Section 13, Township 19 South, Range 34 East, Quail-Queen Pool, Lea County, New Mexico, in such a manner as to permit production of oil from 5080 feet to 5136 feet in the lower Queen formation through tubing and the disposal of produced salt water into the upper Queen formation through the casing-tubing annulus in the perforated interval from 4820 feet to 4830 feet.

CASE 3823: Application of Atlantic Richfield Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres and Paddock formations in its State "A" Well No. 45 located in Unit G, Section 26, Township 17 South, Range 28 East, Expire-Abe Pool, Eddy County, New Mexico, in the perforated interval from 2738 feet to 3032 feet (San Andres) and 3809 feet to 4030 feet (Paddock).

CASE 3824: Application of Atlantic Richfield Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its West Red Lake Unit Area by the injection of water into the Queen, Grayburg, and San Andres formations through 13 wells located in Sections 4, 5, 7, 8, and 9, Township 18 South, Range 27 East, Red Lake Queen Grayburg-San Andres Pool, Eddy County, New Mexico.

CASE 3825: Application of Pan American Petroleum Corporation for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the East Buffalo Valley Unit Area comprising 15,350 acres, more or less, of Federal, State and Fee lands in Township 14 South, Ranges 28 and 29 East, Chaves County, New Mexico.

CASE 3642: (Reopened)

In the matter of Case No. 3642 being reopened pursuant to the provisions of Order No. R-3305, which order established 640-acres spacing units for the North Osudo-Morrow Gas Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

August 7, 1968 - Examiner Hearing

CASE 3803 (Continued and readvertised)

Application of Gulf Oil Corporation for an amendment to Order No. R-3345, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3345, which authorized a waterflood project in its Stuart Langlie Mattix Unit Area, Langlie Mattix Pool, Lea County, New Mexico, to delete the water injection wells previously authorized in Unit M of Section 2, Units A, C, and I of Section 10, and Unit C of Section 11, all in Township 25 South, Range 37 East, and to authorize for water injection four wells at the following unorthodox locations in Section 10: a well 100' from the North line and 1650' from the West line; a well 100' from the North line and 660' from the East line; a well 1315' from the North line and 100' from the West line; and a well 1420' from the South line and 100' from the East line. Applicant also seeks in the amendment authority to convert three additional wells located in Units M and F of said Section 10 and Unit F of said Section 11 to water injection. In the absence of objection, the case will be submitted and an order issued upon the evidence presented in said Case July 10, 1968. 2

CASE 3826: Application of Eugene E. Nearburg for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from approximate 7965 feet to 8015 feet in his Magnolia Burt Federal Well No. 1 located in Unit P, Section 5, Township 8 South, Range 30 East, Cato Field, Chaves County, New Mexico.

CASE 3827: Application of Tri-Service Drilling Company to directionally drill, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its T. P. State Well No. 1 located 1887 feet from the East line and 2126 feet from the South line of Section 1, Township 15 South, Range 38 East, Lea County, New Mexico. Said well was drilled to a total depth of 13,014 feet and has subsequently been whipstocked to a location 596.5 feet east and 181.5 feet north of said surface location. Applicant proposes to set a whipstock at 11,570 feet and directionally drill to a depth of approximately 13,000 feet and to bottom said well in the Devonian formation at a point approximately 300 feet east and 300 feet south of its surface location.

CASE 3828: Application of W. M. Gallaway for a non-standard gas proration unit, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 197.77-acre non-standard gas proration unit comprising the S/2 of Section 18, Township 23 North, Range 3 West, Ballard-Pictured Cliffs Gas Pool, Rio Arriba County, New Mexico, said unit to be dedicated to applicant's Apache Well No. 1 located 835 feet from the South line and 875 feet from the East line of said Section 18.

- CASE 3829: Application of Getty Oil Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C II (a) to permit the drilling of a well at an unorthodox gas well location 1980 feet from the North line and 990 feet from the East line of Section 27, Township 12 South, Range 34 East, West Ranger Lake-Devonian Gas Pool, Lea County, New Mexico. The N/2 of said Section 27 to be dedicated to said well.
- CASE 3830: Application of Kewanee Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Atoka San Andres Unit Area comprising 3,360 acres, more or less, of Fee land in Township 18 South, Range 26 East, Atoka-San Andres Pool, Eddy County, New Mexico.
- CASE 3831: Application of Kewanee Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its Atoka San Andres Unit Area by the injection of water into the San Andres formation through 28 injection wells located in Township 18 South, Range 26 East, Atoka-San Andres Pool, Eddy County, New Mexico.
- CASE 3832: Application of Sinclair Oil & Gas Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Guadalupe Ridge Unit Area comprising 23,358 acres, more or less, of federal and fee lands in Townships 25 and 26 South, Range 21 and 22 East, Eddy County, New Mexico.
- CASE 3833: Application of Petroleum Corporation of Texas for a non-standard gas proration unit and two unorthodox gas well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a non-standard gas proration unit comprising the N/2 SE/4 and SW/4 SE/4 of Section 13, Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, said unit to be dedicated to applicant's Maggie Dunn Wells Nos. 2 and 3 located 990 feet from the East line and 1650 feet from the South line and 1650 feet from the East line and 1650 feet from the South line, respectively, of said Section 13. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

# Gulf Oil Corporation

EXPLORATION AND PRODUCTION DEPARTMENT—U. S. OPERATIONS  
ROSWELL DISTRICT

T. W. Kidd  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

P. O. Drawer 1938  
Roswell, New Mexico 88201

June 18, 1968

*Case 3803*

Secretary Director  
Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Company-U.S. for an  
Amendment to Order No. R-3345, for the  
Stuart Langlie Mattix Unit Waterflood Project,  
Lea County, New Mexico

Dear Sir:

Gulf Oil Company-U.S., a Division of Gulf Oil Corporation, Operator of the Stuart Langlie Mattix Unit in Township 25 South, Range 37 East, Lea County, New Mexico, desires to drill and complete four Line Injection Wells along the Unit border and adjust the waterflood injection pattern as previously approved. Gulf requests that Order No. R-3345, as corrected by R-3345-A and amended by R-3345-B, be further amended for the aforementioned purpose and in support of this application states the following:

- (1) Four new wells will be drilled and completed for the injection of water into the Queen and Lower 100 feet of the Seven Rivers formations. The proposed locations of these wells, all in Section 10, T-25-S, R-37-E, are shown on the attached plat.
  - (a) "Well No. 125, 100' FNL & 1650' FWL, Unit C
  - (b) "Well No. 126, 100' FNL & 660' FEL, Unit A
  - (c) "Well No. 127, 100' FWL & 1315' FNL, Unit D
  - (d) "Well No. 128, 100' FEL & 1420' FSL, Unit I
- (2) The addition of these four new wells will increase the total number of Unit wells from 24 to 28.
- (3) Five of the twelve injection wells originally approved for this waterflood project will be used as producing wells. These wells are:

Operator - Lease	Well No.	Location	Unit Well No.
Gulf J. A. Stuart	5	Unit A, Section 10	111
Gulf J. A. Stuart	7	Unit C, Section 10	113
Richmond Drilling State "A"	2	Unit M, Section 2	106
Sinclair O&G F. Stuart "B"	2	Unit I, Section 10	121
Union Texas Stuart "B"	4	Unit C, Section 11	109

DOCKET MAILED

Date 7-26-68



Secretary Director  
Oil Conservation Commission

- 2 -

June 18, 1968

- (4) Three of the twelve producing wells originally approved will be converted to injection wells. These wells are:

Operator - Lease	Well No.	Location	Unit Well No.
Richmond Drilling State "A"	3	Unit N, Section 2	107
Skelly Oil State "L"	2	Unit F, Section 2	103
Union Texas Stuart "B"	5	Unit F, Section 11	120

- (5) These revisions will provide the Unit with 14 injection wells and 14 producing wells.
- (6) Applicant plans to inject up to 500 BHPD into the Seven Rivers (Lower 100') and Queen formations in the approximate interval 3,100' to 3,500'.
- (7) Injection water will be saline water from the San Andres formation found in the Unit Area at approximately 4,500 feet.
- (8) A Line Well Agreement has been tentatively agreed to by the offset operator and Gulf anticipates no other changes in the planned operation of this waterflood project.
- (9) The following items are enclosed with this Application:
- (a) A Stuart Langlie Mattix Plat showing the revised injection pattern, the four new line injection wells and the proposed line injection wells of the offset operator (Figure III, Revised Exhibit No. 1-D, Revised May, 1968).
  - (b) A Diagrammatic Sketch (Figure VII) typical of the four proposed new line injection wells (Nos. 125, 126, 127 & 128) drilling, completion and casing program.
  - (c) Diagrammatic Sketches (Figures VIII, IX & X) of the three new injection wells (Nos. 103, 107 & 120) showing the completion intervals and casing programs.
- (10) A copy of the well log from the only Unit well that has been logged (Unit Well No. 122) was submitted with the original application for this waterflood project.

Yours very truly,

GULF OIL COMPANY-U.S.  
A DIVISION OF GULF OIL CORPORATION

*M. I. Taylor*  
M. I. Taylor

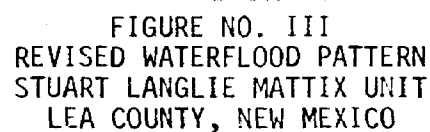
Enclosures  
LCS:ers

cc: New Mexico Oil Conservation Commission  
Post Office Box 1980  
Hobbs, New Mexico 88240

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501

U. S. Department of the Interior  
Geological Survey  
Post Office Box 1857  
Roswell, New Mexico

George L. Buckles Company  
Post Office Box 56  
Monahans, Texas 79756

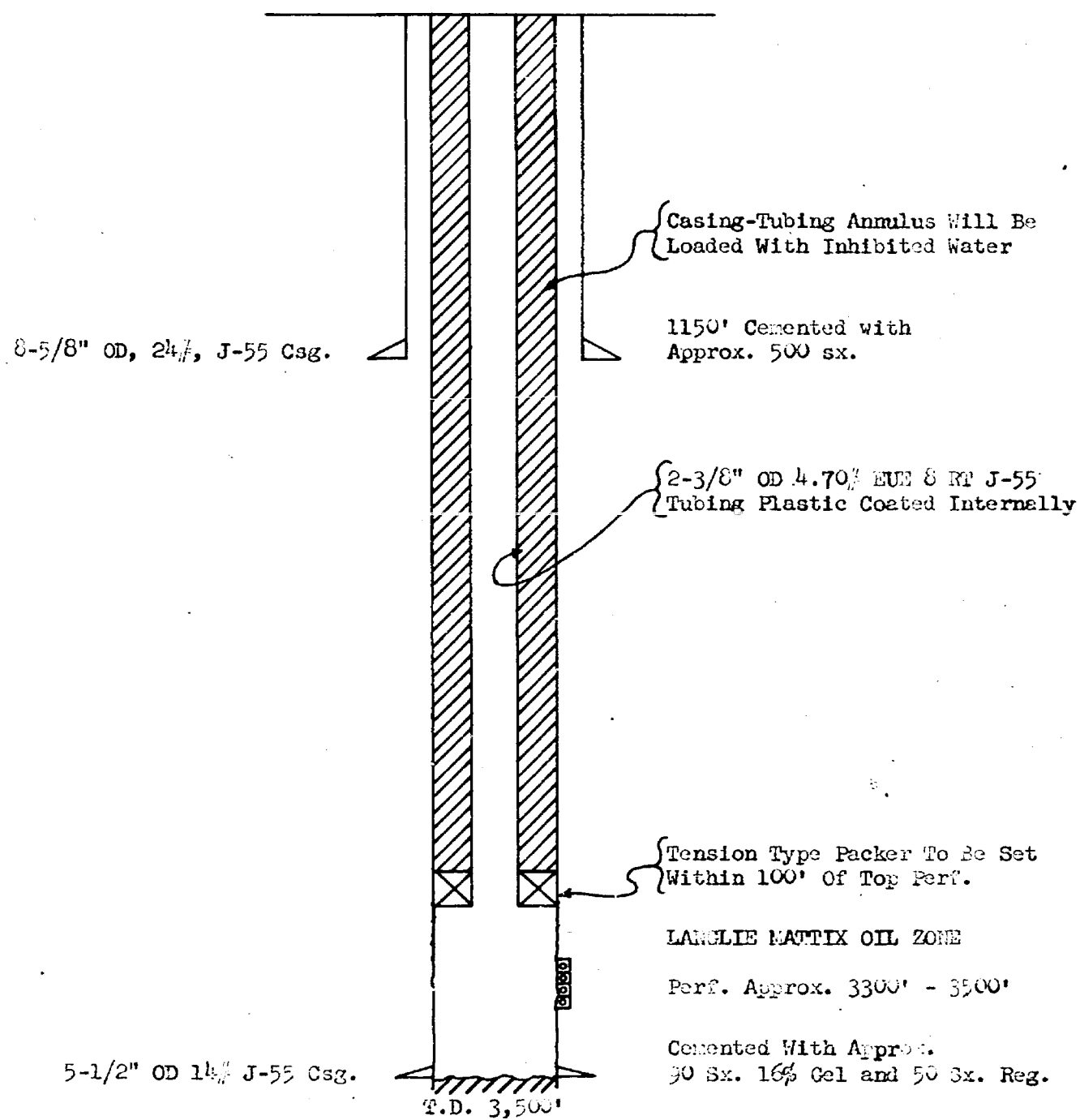


- Langlie Mattix Pool Well
- ✕ Jalmat Pool Gas Well
- ✕ Langlie Mattix - Jalmat Gas Dual
- ✕ 土 Justis Pool Gas Well
- ⊙ Unit Injection Well
- ⊙ Buckles' Injection Well
- ▲ Unit Well to be Drilled for Injection
- ▲ Buckles' Well to be Drilled for Injection

REVISÉD EXHIBIT NO. 1-D

FIGURE VII  
 DIAGRAMMATIC SKETCH  
 Typical Proposed Injection Well  
 To Be Drilled in Section 10-25S-37E

Stuart Langlie Mattix Unit  
 Lea County, New Mexico



Case No. 3803  
 Exhibit No. 1-J

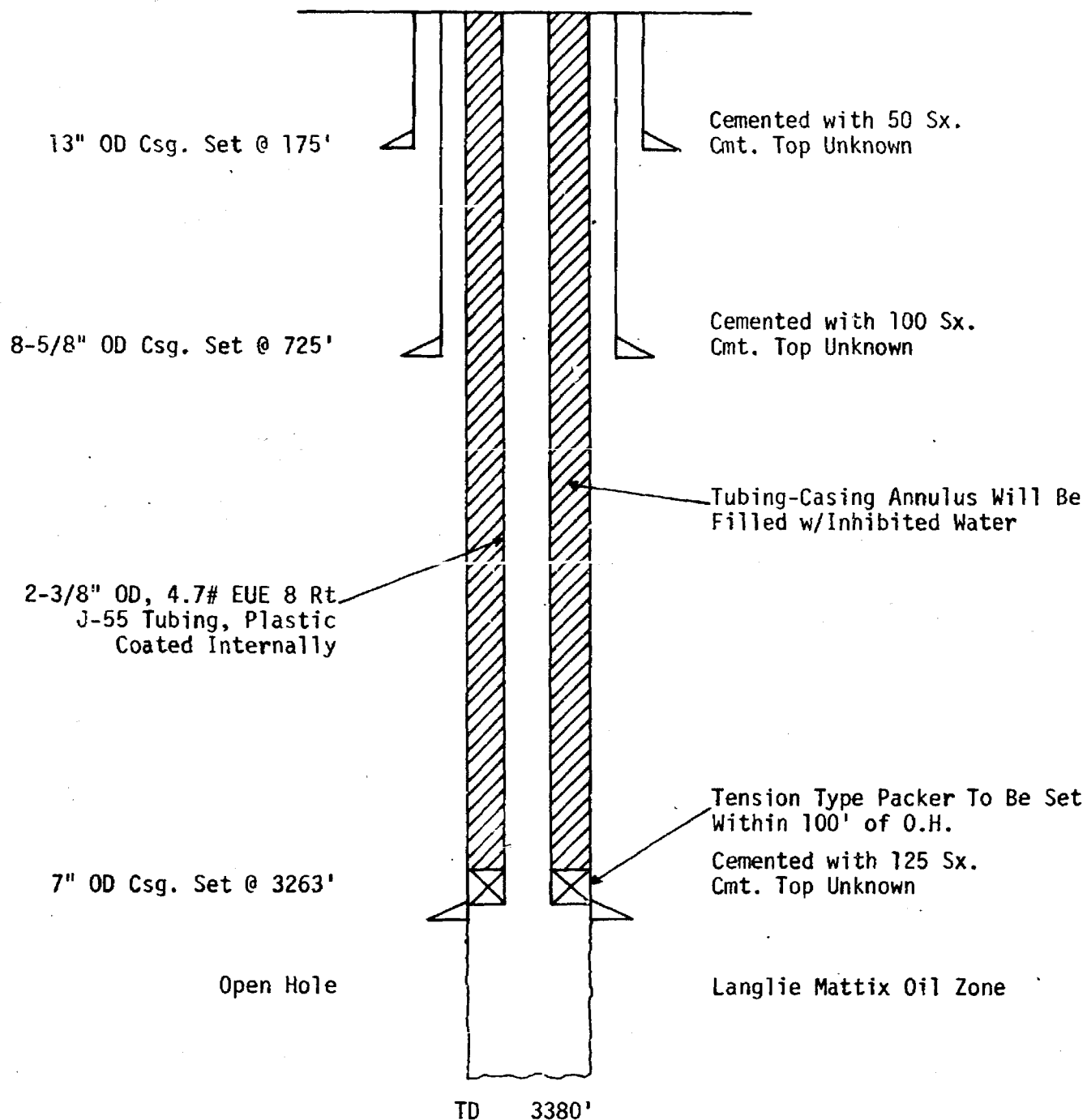


FIGURE VIII  
DIAGRAMMATIC SKETCH  
PROPOSED INJECTION WELL NO. 107

STUART LANGLIE MATTIX UNIT  
LEA COUNTY, NEW MEXICO

RICHMOND DRILLING COMPANY  
STATE "A" WELL NO. 3

LOCATED UNIT N, SEC. 2-25S-37E



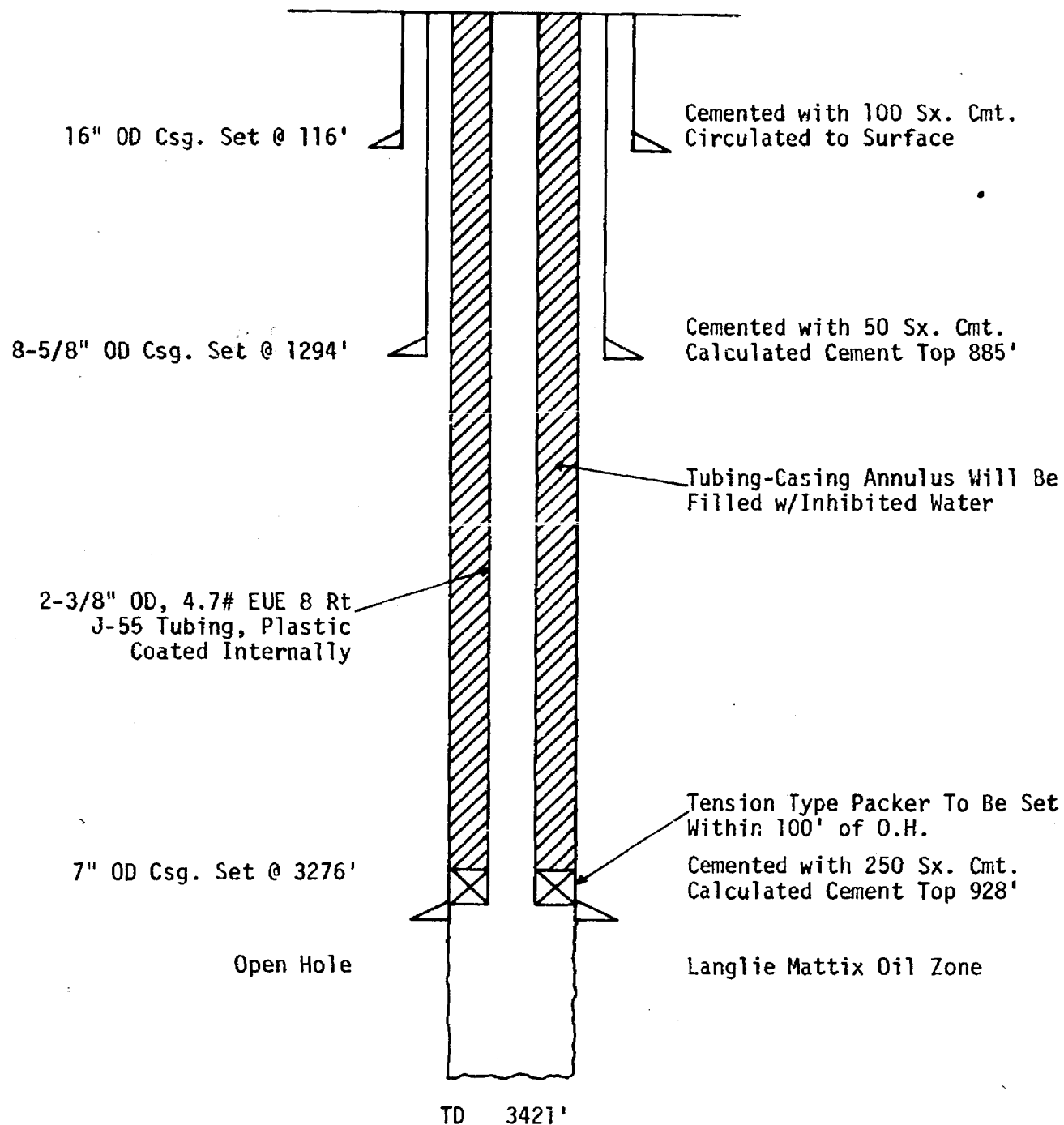
CASE NO. 3803  
EXHIBIT NO. T-K

FIGURE IX  
 DIAGRAMMATIC SKETCH  
 PROPOSED INJECTION WELL NO. 103

STUART LANGLIE MATTIX UNIT  
 LEA COUNTY, NEW MEXICO

SKELLY OIL COMPANY  
 STATE "L" WELL NO. 2

LOCATED UNIT F, SEC. 2-25S-37E



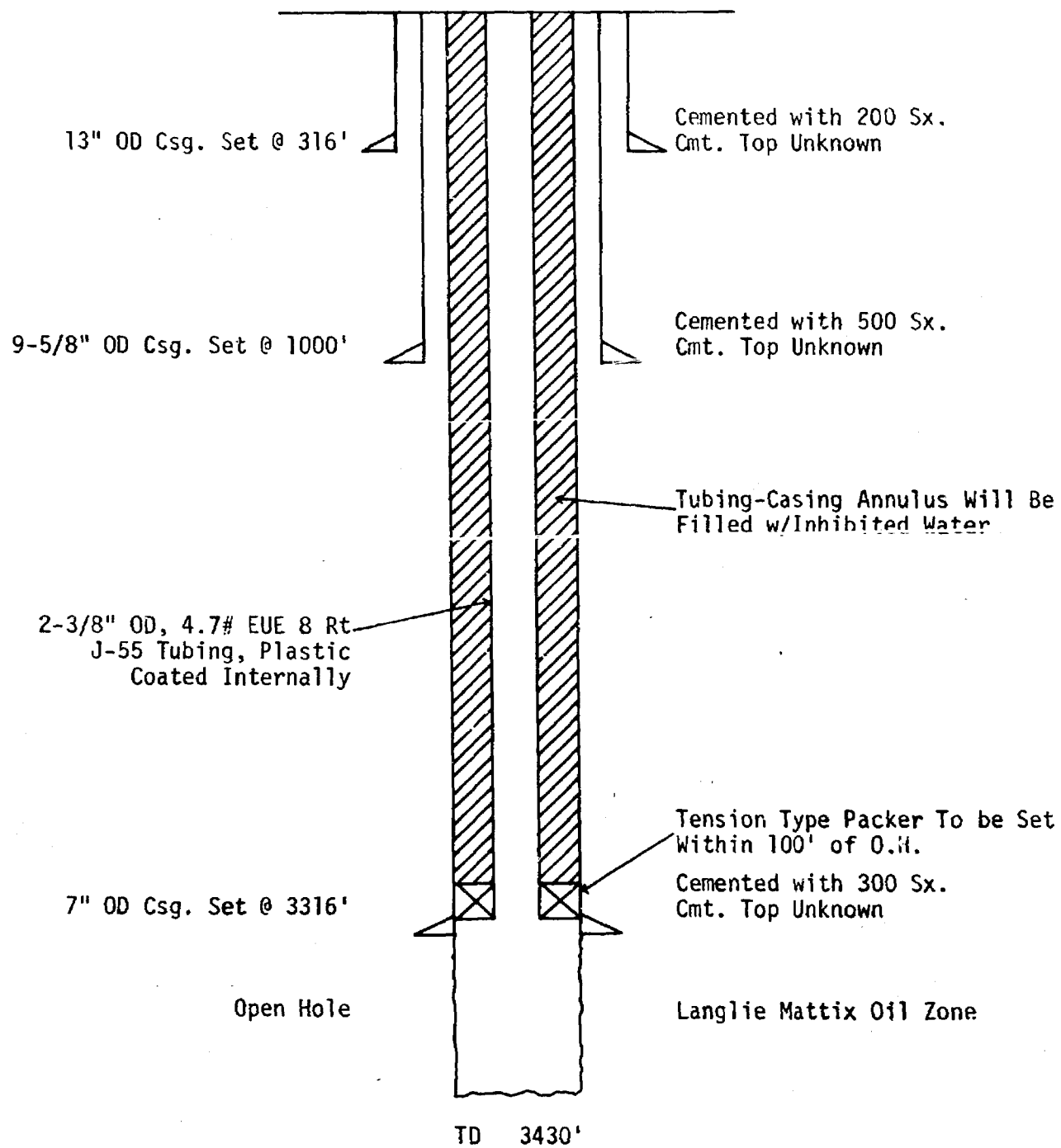
CASE NO. 3803  
 EXHIBIT NO. 1-L

FIGURE X  
DIAGRAMMATIC SKETCH  
PROPOSED INJECTION WELL NO. 120

STUART LANGLIE MATTIX UNIT  
LEA COUNTY, NEW MEXICO

UNION TEXAS PETROLEUM  
STUART WELL NO. 5

LOCATED UNIT F, SEC. 11-25S-37E



CASE NO. 3803  
EXHIBIT NO. 1-M

ROUGH DRAFT

SMH  
WVK

OUTLINE OF TESTIMONY  
OIL CONSERVATION COMMISSION EXAMINER HEARING  
JULY 10, 1968  
CASE NO. 3803 (REOPENED CASE NO. 3684)

*REQUEST THE EXAMINER TO INCORPORATE THE RECORDS OF CASE NO. 3683, 3684 AND 3915  
INTO THE RECORD OF THIS CASE.*

1. Q. Please state your name, address and for whom you work.  
A. Lonnie C. Smith, Roswell, New Mexico. I work for Gulf Oil Company-U.S.  
as a Petroleum Engineer in the Roswell District Office.
2. Q. Have you previously testified before the OCC?  
A. Yes, on several occasions since 1960.
3. Q. Does the OCC accept Mr. Smith as a qualified expert witness?  
A. (Examiner)
4. Q. What is the purpose of this hearing?  
A. Gulf, as Unit Operator of the Stuart Langlie Mattix Unit, requests an  
amendment to Order No. R-3345 for the purpose of adding four new line  
injection wells to the project and adjusting the previously approved  
injection pattern to incorporate these new wells.
5. Q. When did Gulf begin as Operator of this Unit?  
A. Unitization was effective January 1, 1968 and Gulf became Unit Operator on  
that date (OCC Order No. R-3344).
6. Q. Was a waterflood project for this Unit also approved?  
A. Yes, OCC Order No. 3345, as <sup>amended</sup> ~~corrected by Order No. 3345-A and amended by~~  
~~Order No. 3345-B~~, approved a waterflood project consisting of 12 injection  
wells and 12 producing wells.

7. Q. Has this project been installed and put into operation?

A. No, not as yet, due to line well negotiations and revisions in the project design.

8. Q. Why has it been necessary to redesign this project?

A. Redesign of our project has been necessary to gain a more equitable recovery from the unitized property and to have better pattern agreement with other cooperative and unitized waterflood projects which border this Unit on the northwest and south. *These projects were both approved in ORE Order No. R-5426.* Gulf calculates that the net cumulative effect of the four wells and pattern adjustments, in lieu of the previously approved injection pattern, will prevent the off-sweep across the Unit border of a considerable amount of Unit oil. At the same time the additional acreage swept within the Unit Area will increase the recovery of oil to the Unit (~~Cross-examine only - Total additional Unit recovery due to these four wells has been calculated to be approximately 400,000 barrels of oil.~~).

9. Q. Where does Gulf plan to drill these four new injection wells?

A. Gulf proposes to locate the four wells as shown on <sup>Exhibit 1</sup> ~~Figure III~~ (~~revised Exhibit 1-D~~) which is a revised plat of the project. All four wells will be in Section 10, T-25-S, R-37-E:

Well No. 125 is to be 100' FNL & 1650' FWL which puts it in Unit C;

Well No. 126 is to be 100' FNL & 660' FEL which puts it in Unit A;

Well No. 127 is to be 100' FWL & 1315' FNL which puts it in Unit D;

and Well No. 128 is to be 100' FEL & 1420' FSL which puts it in Unit I.

10. Q. How does Gulf propose to complete these four injection wells?

A. <sup>Ex 2</sup> Figure VII (~~Exhibit 1-I~~) is a Diagrammatic Sketch of a typical injection well completion showing the <sup>proposed</sup> ~~approximate~~ casing and tubing sizes, setting points, cement volumes, packer type, packer setting, total depth and interval of perforations.

11. Q. What changes will be necessary in order to incorporate these new injection wells into the revised water injection pattern?

A. Five of the twelve injection wells originally approved will be used as producing wells. Again referring to <sup>Exhibit 1</sup> (Figure No. III) these wells are:

- (1) Unit Well No. 106 which was the Richmond Drilling State "A" Well No. 2, located in SW/4 SW/4 (Unit M) of Section 2;
- (2) Unit Well No. 109 which was the Union Texas Stuart "B" No. 4, located in NE/4 NW/4 (Unit C) of Section 11;
- (3) Unit Well No. 111 which was the Gulf J. A. Stuart No. 5, located in NE/4 NE/4 (Unit A) of Section 10;
- (4) Unit Well No. 113 which was the Gulf J. A. Stuart No. 7, located in NE/4 NW/4 (Unit C) of Section 10;
- (5) Unit Well No. 121 which was the Sinclair F. Stuart "B" No. 2, located in NE/4 SE/4 (Unit I) of Section 10.

12. Q. You have just given the wells to be changed to producing status. Will any wells be changed to become injection wells?

A. Yes, three of the twelve producing wells originally approved will be converted to injection wells. These wells, <sup>referring again to Exhibit No. 1</sup> are:

- (1) Unit Well No. 103 which was the Skelly State "L" No. 2, located in SE/4 NW/4 (Unit F) of Section 2;
- (2) Unit Well No. 107 which was the Richmond Drilling State "A" No. 3, located in SE/4 SW/4 (Unit N) of Section 2;
- (3) Unit Well No. 120 which was the Union Texas Stuart "B" No. 5, located in SE/4 NW/4 (Unit F) of Section 11.

13. Q. How will injection Wells No. 103, 107 and 120 be completed?

A. <sup>Exhibits 3, 4 and 5</sup> (Figures VIII, IX and X) ~~(Exhibits I-K, 1-L and 1-M, respectively)~~ are Diagrammatic Sketches showing the specific completion details of Wells

No. 103, 107 and 120, respectively. All three of the wells are similar as to casing sizes, settings and completed open hole. The 2-3/8" OD injection tubing will be installed with a tension type packer set within 100' of the open hole.

14. Q. When the requested changes in this project are approved, how many total wells will there be?
- A. Twenty-eight (28). There were 24 wells originally approved as Unit wells and the addition of 4 new line injection wells will make the total 28 wells.
15. Q. How many of these 28 Unit wells will be injection wells and how many will be producing wells?
- A. There will be 14 injection wells and 14 producing wells.
16. Q. Will injection of water into these four new line injection wells differ from the original injection plans for this project?
- A. No. It is still essentially an 80-acre 5-spot pattern into which we propose to inject up to 500 barrels per day of saline San Andres water at approximately 1000 psi.
- ~~(Possible cross-exam concerning San Andres water supply - Gulf has just re-entered its J. A. Stuart Well No. 9, located NE/4 NE/4 NE/4 Section 10, and has successfully recompleted this well as a San Andres WSW. Producing equipment is now being installed so the well can be adequately tested. Swab testing indicates a capability of 2500 BWPD with a constant fluid level at 800 feet from the surface.)~~
17. Q. Will the addition of the 4 new injection wells to the Unit affect the maximum Unit allowable already approved for this project?
- A. Yes, the previous calculation is based on 24 qualified proration units in the approved project area with one well on each proration unit. The new maximum Unit allowable will include these same 24 proration units but since four proration units will contain two wells each, the new

calculation will be based on a total of 20 proration units, with one well each, times the basic Area Allowable Factor of 42 BOPD, plus four proration units, with two wells each (quote a portion of Rule 701-E-3-b) "increased by an amount of oil equal to 0.333 times the basic Area Allowable Factor" ( $42 + 42 \times .333$  BOPD) or 55.986 BOPD. Gulf calculates that the maximum total Unit allowable will be increased from 1008 BOPD (Order No. 3345) to 1064 BOPD, an increase of 56 BOPD.

18. Q. *Move to admit* Will the Examiner accept Exhibits marked 1-D Revised, 1-J, 1-K, 1-L and 1-M? *1 through 5 into evidence.*

~~Additional possible questions - either direct or by cross-examination:~~

~~Q. Has the U.S.G.S. and State Land Commissioner been notified?~~

~~A. Yes, each received a copy of the application.~~

~~Q. Were all offset operators notified?~~

~~A. No, only the George L. Buckles Company. This is the only offset operator with Langlie Mattix oil production in the vicinity of the new injection wells.~~

~~(Aikman's M. E. Hale No. 1 (Unit G), SW/4 NE/4 Sec. 2 produces Langlie Mattix gas only).~~

~~(Sinclair's State "B" WN (Unit C), NE/4 NW/4 Sec. 2 produces Jalmat gas only).~~

~~Q. Does the Unit have a line well agreement with Buckles Company?~~

~~A. The Unit has tentative approval from the Buckles Company on an agreement which the Working Interest Owners of the Unit have now approved. This agreement was mailed to Buckles for execution on June 28, 1968.~~



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. 3715  
Order No. R-3345-B

APPLICATION OF GULF OIL CORPORATION  
FOR AN AMENDMENT TO ORDER NO. R-3345,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 24, 1968,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st day of January, 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 Orders No. R-3345 as corrected by R-3345-A autho-  
rized the applicant, Gulf Oil Corporation, to institute the Gulf  
Stuart Langlie Mattix Waterflood Project in the Stuart Langlie  
Mattix Unit Area, Langlie-Mattix Pool, by the injection of water  
into the Seven Rivers and Queen formations, Lea County, New  
Mexico.

(3) That the applicant, Gulf Oil Corporation, now seeks  
amendment of Orders No. R-3345 as corrected by R-3345-A to  
substitute the Sinclair Stuart "B" Well No. 2 located in Unit I  
and the Sinclair Stuart "C" Well No. 3 located in Unit K as  
water injection wells in said project in lieu of the Sinclair  
Stuart "A" Well No. 1 located in Unit J and the Sinclair Stuart  
"D" Well No. 4 located in Unit L, all in Section 10, Township 25

-2-

CASE No. 3715

Order No. R-3345-B

South, Range 37 East, NMPM, Langlie-Mattix Pool, Lea County,  
New Mexico.

(4) That approval of the subject application will not violate correlative rights and should increase the efficiency of the Gulf Stuart Langlie Mattix Waterflood Project and result in greater ultimate recovery of oil, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That Order No. R-3345 as corrected by R-3345-A is hereby amended by deleting from the water injection wells authorized for the Gulf Stuart Langlie Mattix Waterflood Project in the Stuart Langlie Mattix Unit Area the Sinclair Stuart "A" Well No. 1 located in Unit J and the Sinclair Stuart "D" Well No. 4 located in Unit L, and substituting in lieu thereof as water injection wells the Sinclair Stuart "B" Well No. 2 located in Unit I and the Sinclair Stuart "C" Well No. 3 located in Unit K, all in Section 10, Township 25 South, Range 37 East, NMPM, Langlie-Mattix Pool, Lea County, New Mexico.

(2) 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, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

CASE No. 3684  
Order No. R-3345-A

IN THE MATTER OF THE APPLICATION OF  
GULF OIL CORPORATION FOR A WATERFLOOD  
PROJECT, LEA COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE COMMISSION:

It appearing to the Commission that due to typographical error, Order No. R-3345, dated November 15, 1967, does not correctly state the intended order of the Commission,

IT IS THEREFORE ORDERED:

(1) That the last line of Order (1) of Order No. R-3345, wherein the Union Texas Stuart "B" Well No. 2 is incorrectly shown as located in Unit F of Section 11, is hereby corrected by the substitution of Unit E for Unit F in order to show the true location of said Union Texas Stuart "B" Well No. 2.

(2) That the correction set forth above shall be effective nunc pro tunc as of November 15, 1967.

DONE at Santa Fe, New Mexico, on this 20th day of November, 1967.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

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

S E A L

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:

CASE No. 3684  
Order No. R-3345

APPLICATION OF GULF OIL CORPORATION  
FOR A WATERFLOOD PROJECT, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 8, 1967, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of November, 1967, 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, Gulf Oil Corporation, seeks permission to institute a waterflood project in its Stuart Langlie Mattix Unit Area, Langlie-Mattix Pool, by the injection of water into the Seven Rivers and Queen formations through twelve injection wells in Sections 2, 10, and 11, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

-2-

CASE No. 3684

Order No. R-3345

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to institute a waterflood project in its Stuart Langlie Mattix Unit Area, Langlie-Mattix Pool, by the injection of water into the Seven Rivers and Queen formations through the following-described wells in Township 25 South, Range 37 East, NMPM, Lea County, New Mexico:

*checks are there to be deleted -*

LEASE	WELL NO.	UNIT	SECTION
Skelly State "L"	1	E	2
Richmond State "A"	4	K	2
Richmond State "A"	2	M	2 ✓ p
Gulf Stuart	5	A	10 ✓ p
Gulf Stuart	7	C	10 ✓ p
Union Texas Stuart	1	E	10
Gulf Stuart	1	G	10
Sinclair Stuart "B"	<del>1</del> 2	<del>I</del> I	10 Sub A R-3345-B p
Sinclair Stuart "C"	<del>4</del> 3	<del>K</del> K	10 " " " " " "
Union Texas Jal	3	E	11
Union Texas Stuart "B"	4	C	11 ✓ p
Union Texas Stuart "B"	2	<del>E</del> E	11 corrected by R-3345-A

(2) That the subject waterflood project is hereby designated the Gulf Stuart Langlie Mattix Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

-3-

CASE No. 3684  
Order No. R-3345

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GUYTON B. HAYS, Member

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

S E A L

esr/

Case 3803.

Heard 7-10-68

Rec. 7-10-68

Grant Gulf and amendment to R-3345 as amended by 3345-A+B, for approval of 4 ~~separate~~ locations for injection wells. The correct locations for these wells is on pg. 1 of their application. All ~~wells~~ injection wells shall be lined with I.D.-P.C. 2  $\frac{3}{8}$  and shall have a packer installed as close to the ~~foot~~ casing shoe or the top perforation as possible. The annulus shall be filled with inhibited fluid & shall either be left open or have a pressure gauge installed at the surface.

Trust Co.

In Addition to the 4 wells above, add 3 more injection wells as listed on page 2 of their application. 7 wells in all.

Further amend R-3345, A+B, by deleting the five (5) previously approved injection wells listed on bottom of Page 1 of their application.

Trust Co.

Write order & hold until after rec'd certifying & July 7 hearing.

500

If you want to remember the 7 injection wells listed on 3345 the numbers are noted in red on copy of order.

dearnley-meier reporting service, inc.

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6491 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 10, 1968

EXAMINER HEARING

-----  
IN THE MATTER OF: )

Application of Gulf Oil Corporation )  
for an amendment to Order No. R-3345, )  
Lea County, New Mexico. )  
-----

Case No. 3803

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



MR. UTZ: Case 3803.

MR. HATCH: Case 3803: Application of Gulf Oil Corporation for an amendment to Order No. R-3345, Lea County, New Mexico.

MR. KASTLER: I am Bill Kastler, appearing on behalf of Gulf Oil Company, U.S.A. Division of Gulf Oil Corporation. Our witness today is Lonnie C. Smith.

(Witness sworn.)

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

MR. UTZ: Are there any other appearances? You

may proceed.

LONNIE C. SMITH

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

DIRECT EXAMINATION

BY MR. KASTLER:

Q Please state your name, address and for whom you work.

A I am Lonnie C. Smith. I live in Roswell, New Mexico. I work for Gulf Oil - U. S. as a petroleum engineer in the Roswell District Office.

Q Have you previously qualified and testified before the New Mexico Oil Conservation Commission?

A Yes, on several occasions since 1960.

Q Mostly in connection with this case.

MR. KASTLER: Are Mr. Smith's qualifications acceptable?

MR. UTZ: Yes, sir, they are.

Q (By Mr. Kastler) Will you please explain what the purpose of this hearing is?

A Gulf, as unit operator of the Stuart Langlie Mattix Unit, requests an amendment to Order R-3345 for the purpose of adding four new line injection wells to the project and adjusting the previously approved injection pattern to incorporate these new wells.

Q When did Gulf begin its operation on this unit?

A The unitization was effective January 1st of this year when Gulf became unit operator on that date by Order Number R-3344.

Q Was a waterflood project for this unit also approved?

A Yes. The O.C.C. Order R-3345, as amended, approved a waterflood project consisting of 12 injection wells and 12 producing wells.

Q Has this project been installed and put into operation at the present time?

A No, not as yet, due to line well negotiations and revisions in the project design.

Q Why is it necessary to redesign this project?

A Redesign of our project has been necessary to gain a more equitable recovery from the unitized property and to have better pattern agreement with other cooperative and unitized waterflood projects which border this unit on the northwest and south. These projects were both approved in O.C.C. Order Number R-3426. Gulf calculates that the net cumulative effect of the four wells and pattern adjustments, in lieu of the previously approved injection pattern, will prevent the offswEEP across the unit border of a considerable amount of unit oil. At the same time the additional acreage swept within the unit area will increase the recovery of oil to the unit.

Q Where does Gulf plan to drill these four new injection wells?

A Gulf proposes to locate the four wells as shown on Exhibit 1. If you will refer to that exhibit, please. This is revised Figure III, Roman Figure III. It's a plat of the project. All four wells will be in Section 10, Township 25 South, Range 37 East. Well Number 125 --

MR. UTZ: Excuse me a minute. You say Roman Exhibit

III?

THE WITNESS: Figure III. It's Exhibit 1, Roman Figure III.

MR. KASTLER: Off the record.

(Whereupon, a discussion was held off the record.)

A In reference to this plat, Well 125 is to be 100 feet from the north line and 1650 feet from the west line, which puts it in Unit C of Section 10. Well Number 126 is to be 100 feet from the north line and 660 feet from the east line, which puts it in Unit A of Section 10. Well Number 127 is to be 100 feet from the west line and 1315 feet from the north line, which puts it in Unit D of Section 10; and Well Number 128 is to be 100 feet from the east line and 1420 feet from the south line, which puts it in Unit I.

MR. UTZ: Now, those are the four new wells?

THE WITNESS: Those are the four new injection wells proposed. They're colored orange on the plat.

MR. HATCH: Are those footage descriptions given some place else?

MR. UTZ: Yes, they're in the application.

MR. KASTLER: They're in the application.

THE WITNESS: Yes, sir. They're in the application this same way, I think.

MR. KASTLER: Correct.

THE WITNESS: Under subparagraph labeled one in the application.

Q (By Mr. Kastler) How does Gulf propose to complete these four injection wells?

A Exhibit 2, which is a Figure VII of your exhibits, is a diagrammatic sketch of a typical injection well completion showing the proposed casing and tubing sizes, setting points, cement volumes, packer type, packer setting, total depth and interval of perforations.

Q What changes will be necessary in order to incorporate these new injection wells into the revised water injection pattern?

A Five of the twelve injection wells originally approved will be used as producing wells. Again referring to Exhibit 1, these wells are: Unit Well Number 106, which was the Richmond Drilling State "A" Well Number 2, located in the Southwest Quarter of the Southwest Quarter of Section 2; Unit Well Number 109, which was the Union Texas Stuart "B" Number 4, located in the Northeast Quarter of the Northwest Quarter of Section 11; Unit Well Number 111, which was the Gulf J. A. Stuart Number 5, located in the Northeast Quarter of the Northeast Quarter of Section 10; Unit Well Number 113, which was

the Gulf J. A. Stuart Number 7, located in the Northeast Quarter of the Northwest Quarter of Section 10; and Unit Well Number 121, which was the Sinclair F. Stuart "B" Number 2, located in the Northeast Quarter of the Southeast Quarter of Section 10.

Q Now, those were previously proposed as injection wells and now they will be producing wells, is that correct?

A That is correct.

Q Those that you have just identified?

A Correct.

Q You have just given the wells to be changed to producing status. Will any wells be changed to become injection wells?

A Yes, three of the twelve producing wells originally approved will be converted to injection wells. Referring again to Exhibit 1, these wells are Unit Well Number 103, which was the Skelly State "L" Number 2, located in the Southeast Quarter of the Northwest Quarter of Section 2; Unit Well Number 107, which was the Richmond Drilling State "A" Number 3, located in the Southeast Quarter of the Southwest Quarter of Section 2; and Unit Well Number 120, which was the Union Texas Stuart "B" Number 5, located in the Southeast Quarter of the Northwest Quarter of Section 11.

Q Will you explain how injection Wells Numbers 103, 107 and 120 will be completed?

A Referring to Exhibits 3, 4 and 5, which are also marked Figures, Roman Figures VIII, IX and X, respectively, these are diagrammatic sketches showing the specific completion details of Wells 103, 107 and 120. All three of these wells are similar as to casing sizes, settings and completed open hole. The 2-3/8-inch OD injection tubing will be installed with a tension type packer set within 100 feet of the open hole.

Q Will the tubing be coated internally, plastic-coated?

A Yes, as indicated on the diagrammatic sketches, we propose to internally plastic-coat the tubing and load the casing tubing annulus with inhibited water.

Q And that same proposal as to internally-coated tubing and tubing casing annulus, inhibited water will be incorporated in the new wells you are drilling as well, will it not?

A That's true.

Q When the requested changes in this project are approved, and if they are approved, how many total wells will there be?

A Twenty-eight wells. There were 24 wells originally

approved as unit wells and the addition of four new line injection wells will make a total of 28 wells.

Q How many of these 28 unit wells will be injection wells and how many will now be producing wells?

A There will be 14 injection wells and 14 producing wells.

Q Will the injection of water into these four new line injection wells differ from the original injection plans for this project?

A No. It is still essentially an 80-acre five-spot pattern into which we propose to inject up to 500 barrels a day of saline San Andres water up to approximately 1000 psi.

Q Will the addition of the four new injection wells to the unit affect the maximum unit allowable already approved for the project?

A Yes, the previous calculation is based on 24 qualified proration units in the approved project area with one well on each proration unit. The new maximum unit allowable will include these same 24 proration units, but since four proration units will contain two wells each, the new calculation will be based on a total of 20 proration units, with one well each, times the basic area allowable factor of 42 barrels of oil per day, plus four proration units with two



wells each, and to quote a portion of Rule 701-E-3-b, "increased by an amount of oil equal to 0.333 times the basic area allowable factor". This is simply the 42 barrels per day plus 42 times .333 or 55.986 barrels of oil per day each for those four particular proration units. Gulf calculates that the maximum total unit allowable will be increased from 1,008 barrels of oil per day, as allowed by Order R-3345, to 1,064 barrels of oil per day, an increase of 56 barrels of oil per day.

Q Mr. Smith, if this application for the amendment of a previous order were granted, would it in your opinion operate for the prevention of waste and the protection of correlative rights?

A Yes, it certainly would, and it, again, will allow us more efficient recovery of oil within the unit area.

MR. KASTLER: This concludes the questions I have on direct examination and I would like at this time that Exhibits 1 through 5 be admitted into evidence.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

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

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Smith, I think we had better be sure of what we have got here. To begin with, I think we ought to start with Order 3345 wherein are listed 12 injection wells which were approved by that order. Now, to begin with, I believe Order 3345-A made a correction to one unit, which was the Union of Texas Stuart "B", changed that unit to "E" instead of "F".

A Yes, sir, I think that was just a typographical error and had to be corrected.

Q Order 3345-B substituted two wells, which was Sinclair Stuart Number 1 to the Sinclair Stuart "B" Number 2, is that correct?

A Yes, sir.

Q And the Sinclair Stuart Number 4 in Unit L to the Sinclair Stuart "C" Number 3?

A Correct.

Q Unit K?

A Correct.

Q Now, what has happened to these 12 wells? First let me say that we are aware of the fact that the Richmond "A" Number 2 you converted to production.

A Now, what was that statement again, please? That

we converted Richmond "A" Number 2 --

Q Or going to convert it to production if you haven't already.

A Right, that's our proposal.

Q And the Gulf Stuart 5 in Unit A of 10, to production?

A Yes, sir.

Q And the Sinclair Stuart "B" Number 2 in Unit I to production?

A Yes, sir.

Q And the Union of Texas Stuart "B" 4 in Unit C to production?

A Yes. And the Gulf Stuart Number 7 also.

Q Number 7. Gulf Stuart Number 7?

A Yes, sir.

Q Now, that's five of these 12 you are going to convert to production. What's going to happen to the other seven?

A Well, three of them, well, we're going to end up with 14 injection wells and 14 producing wells and by converting these five that were proposed originally as injection wells to producing wells, that will give us five producing wells plus the producing wells we already had approved, less the three we propose to change back to injection wells. It's quite confusing

almost any way you go at it, I think. If you would like, we can name, we can just go down the list and name the 14 injection wells that we propose and the 14 producing wells that we propose. We have already done it, really.

MR. KASTLER: Haven't you identified them by the circles around them?

THE WITNESS: Yes, this plat identifies what we now propose to be the injection and producing wells. The ones with the circles will be the proposed injection wells, the circles plus the four new line wells, which are orange triangles.

MR. UTZ: I think the problem here is this ad was only for four injection wells and you are changing three others, aren't you?

MR. KASTLER: Yes, sir.

THE WITNESS: Our application was --

MR. KASTLER: Of necessity.

THE WITNESS: Our application was for four new injection wells, changing five injection wells to producing status, and three producing, approved producing wells to injection status.

Q (By Mr. Utz) Well, somehow we got to know what's going to happen to these seven wells over here in this original order because we don't know whether to amend that portion of it or what.

MR. PORTER: Off the record a minute.

MR. UTZ: Yes, I think we ought to go off the record.

(Whereupon, a discussion was held off the record.)

MR. UTZ: Let's go back on the record. In view of the fact that it looks as though there are three injection wells to be converted in addition to the five non-standard injection wells requested in the advertisement of 3803, we will consider the possibility, and if necessary, readvertise the case at the next advertising, if necessary. We'll get together after the hearing and straighten out all this deal.

Are there any other questions of the witness?

Q (By Mr. Utz) Oh, I did notice that Well 127 that was shown improperly on your Exhibit 1 in the plat, that was filed with the application, is that correct or am I wrong?

A Yes, sir. I did have, I'm sorry, I didn't note that but I did have that changed because it was shown in Unit D.

Q It is in Unit D?

A It was shown in Unit E and it is in Unit D.

Q All right, okay. So your exhibit is correct.

A However, it was advertised correctly.

Q Yes.

MR. UTZ: Any other questions?

MR. KASTLER: I would like to ask a question or two on redirect.

REDIRECT EXAMINATION

BY MR. KASTLER:

Q What are Gulf's plans with regard to drilling these unorthodox injection wells? Are they drilled now? When do you plan to drill them?

A No. We can only drill them after we have approval, but we would plan to do it before the year is out.

Q Has your offset operator drilled his wells?

A No, but he has approval for his wells and it's my understanding that he's going to drill them in the very immediate future, very soon.

MR. KASTLER: That's all.

MR. UTZ: Any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements? The case will be taken under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
LONNIE C. SMITH	
Direct Examination by Mr. Kastler	2
Cross Examination by Mr. Utz	11
Redirect Examination by Mr. Kastler	15

<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1 through 5	2	10

STATE OF NEW MEXICO )  
 ) ss  
 COUNTY OF BERNALILLO )

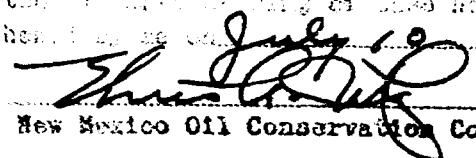
I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings,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

Witness my Hand and Seal this 18th day of July, 1965.

  
 NOTARY PUBLIC

My Commission Expires:

June 19, 1971.

I do hereby certify that the foregoing is a true and correct record of the proceedings in the hearing of Case No. 3803, held on July 19, 1965.  
  
 Chairman  
 New Mexico Oil Conservation Commission



dearnley-meier reporting service, inc.

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

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



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 7, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation  
for an amendment to Order No. R-3345,  
Lea County, New Mexico.

)  
)  
)  
) Case No. 3803  
) (Continued and  
) readvertised)

BEFORE: Elvis A. Utz  
Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3803.

MR. HATCH: Case 3803, continued and readvertised.  
Application of Gulf Oil Corporation for an amendment to Order  
No. R-3345, Lea County, New Mexico.

MR. KASTLER: Bill Kastler, Attorney for Gulf, on  
behalf of Gulf. And I would like to state that the case has  
been readvertised and re-readvertised, this time, correctly,  
and I would like to move at this time that the evidence, that  
is, the testimony and the exhibits presented on July 10, 1968  
at the earlier hearing at which you presided, Mr. Utz, be  
taken under advisement and considered our total evidence in  
this case with one slight exception.

In Exhibit Number 2, which shows a typical proposed  
injection well to be drilled in Section 10, 25 South, --

MR. UTZ: Just a minute. Let me find that exhibit.

MR. KASTLER: -- 37 East.

MR. UTZ: Exhibit Number 2?

MR. KASTLER: Exhibit Number 2, yes, sir.

MR. UTZ: All right.

MR. KASTLER: We had reported, or we earlier reported  
that Gulf was proposing to complete that well by setting surface  
casing at 1150 feet approximately and cemented with approximately  
500 sacks. Our plans have now changed. We would like to carry  
the surface casing through the Rustler Formation in order to

prevent the occurrence of corrosive water and cement the appropriate -- circulate the amount of cement that would be necessary on that to carry the cement, I believe, back to the surface.

MR. UTZ: How deep is the Rustler Formation?

MR. KASTLER: I'm not prepared to say, Mr. Utz, but we will take the top of it at 1150 or above it.

MR. UTZ: Was it deeper?

MR. KASTLER: It's deeper, and if your Order should provide that -- be conditioned upon our setting surface casings through the Rustler, we would be happy to oblige you.

MR. UTZ: All right, sir.

MR. HATCH: Mr. Kastler, as it appears in the docket here, there is a mistake, isn't there?

MR. KASTLER: There is. Section 10 in the fourth line from the bottom, the whole line reads: "wells located in Units N and F of said Section 10". That should be Section 2.

MR. HATCH: And that was advertised as Section 10 the first time but was corrected and, yet advertised, would run July the 30th --

MR. KASTLER: 31st.

MR. HATCH: 31st?

MR. KASTLER: I have a clipping from The New Mexican dated July 31st and an appropriate affidavit of publication, I

believe, is in your files.

MR. UTZ: The reason for all this confusion was that you wanted three producing wells --

MR. KASTLER: Injection.

MR. UTZ: -- to be converted as injection wells.

MR. KASTLER: Yes, that's correct.

MR. UTZ: The record of the hearing in this case, July 10, 1968, will be incorporated into the record of this case today.

MR. KASTLER: Thank you.

MR. UTZ: The case will be taken under advisement.

MR. KASTLER: I assume there are no appearances or objections to the advertisement.

MR. UTZ: Are there any appearances or objections in this case?

MR. KASTLER: I would like the record to so show.

MR. UTZ: None appeared.

MR. KASTLER: Thank you.

STATE OF NEW MEXICO    )  
                               )   ss.  
 COUNTY OF BERNALILLO )

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

Witness my Hand and Seal this 22nd day of September, 1968.

Charlotte Macias  
 Notary Public

My Commission Expires:

February 10, 1971.

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the hearing of Case No. 383  
 heard by me on Aug 27, 1968.  
Thos. L. [Signature], Examiner  
 New Mexico Oil Conservation Commission

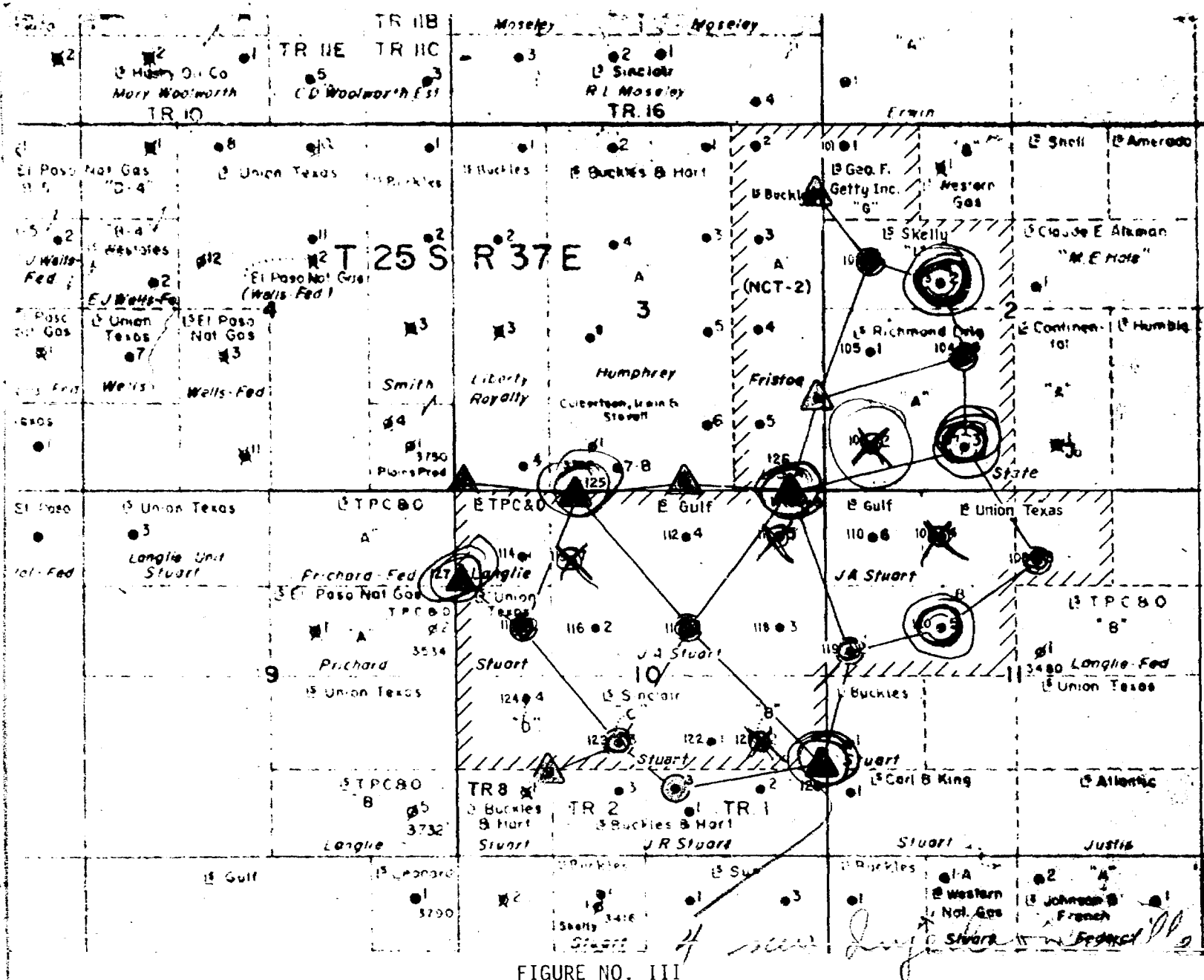


FIGURE NO. III  
REVISED WATERFLOOD PATTERN  
STUART LANGLIE MATTIX UNIT  
LEA COUNTY, NEW MEXICO

- LEGEND -

////// Unit Boundary

Unqualifying Tract

- Langlie Mattix Pool Well
- ✕ Jalmat Pool Gas Well
- ✕ Langlie Mattix - Jalmat Gas Dual
- ✕ Justis Pool Gas Well
- ⊙ Unit Injection Well
- ⊙ Buckles' Injection Well
- ▲ Unit Well to be Drilled for Injection
- ▲ Buckles' Well to be Drilled for Injection

BEFORE EXAMINER UTZ

EXHIBIT NO. 1

CASE NO. 3803

Part III

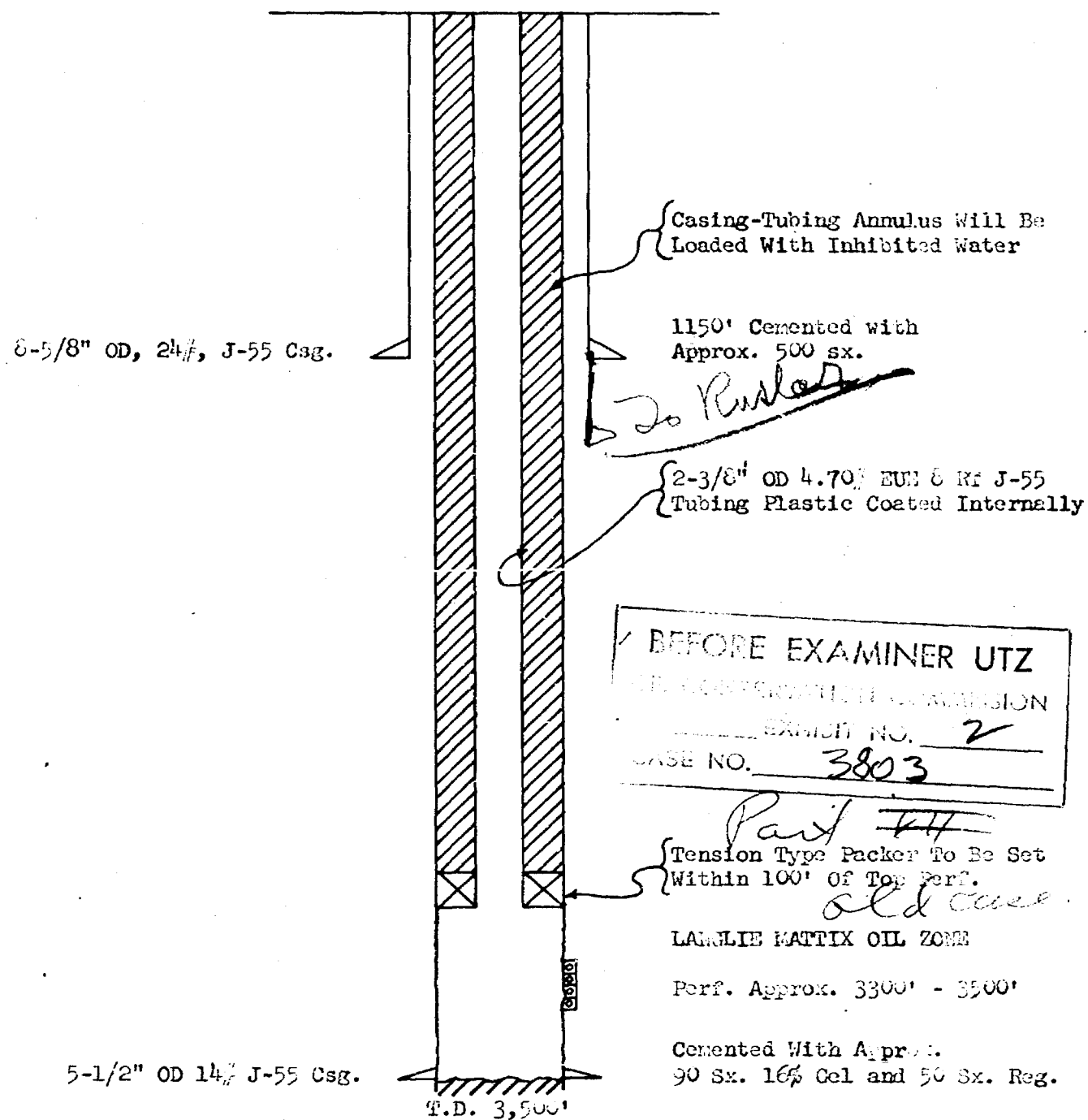
GULF OIL CORPORATION ROSWELL DISTRICT

(Revised May, 1968)

CASE NO. 3803

REVISED EXHIBIT NO. 1-D

FIGURE VII  
 DIAGRAMMATIC SKETCH  
 Typical Proposed Injection Well  
 To Be Drilled in Section 10-25S-37E  
 Stuart Langlie Mattix Unit  
 Lea County, New Mexico



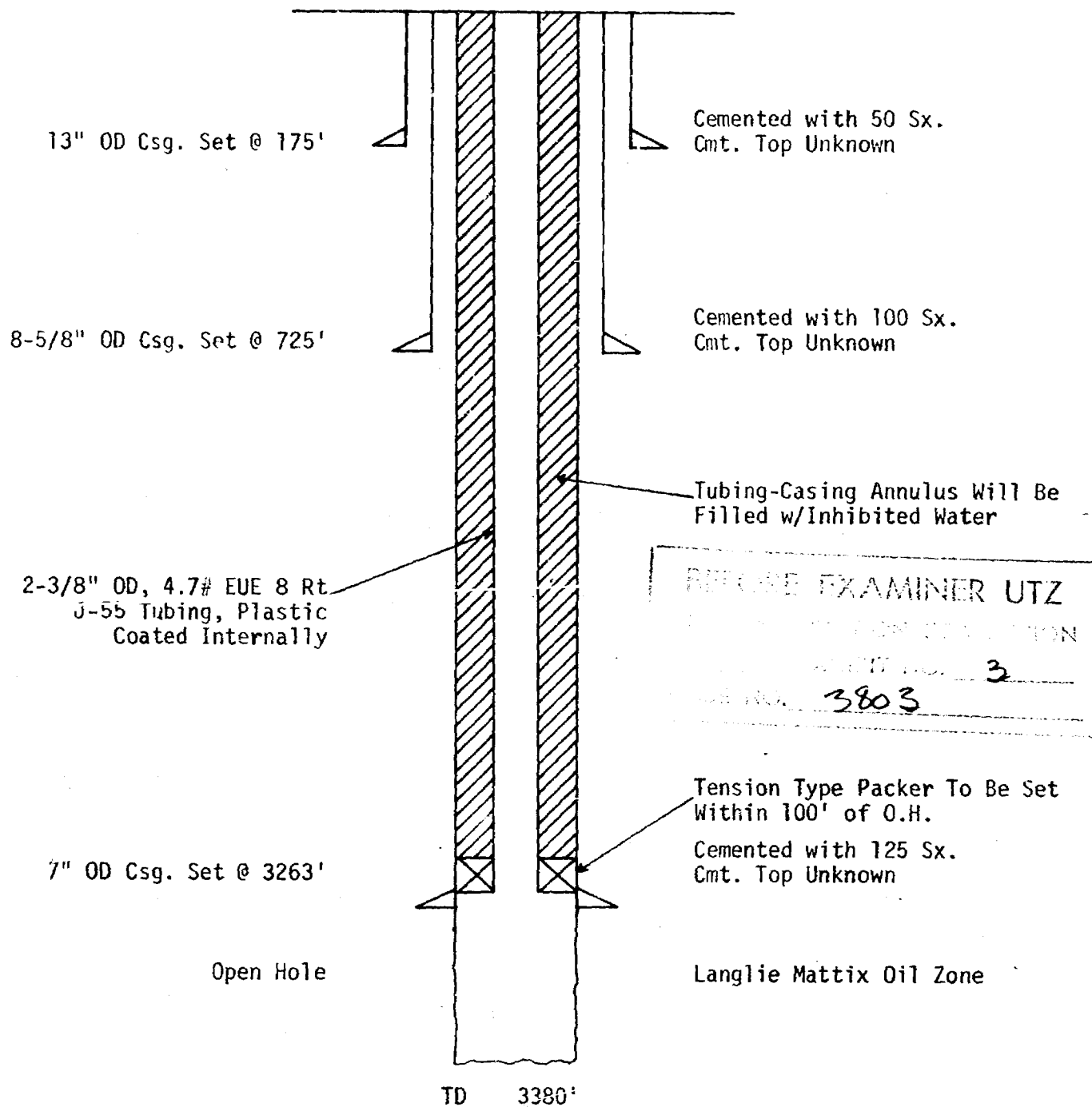
Case No. 3803  
 Exhibit No. 1-J

FIGURE VIII  
DIAGRAMMATIC SKETCH  
PROPOSED INJECTION WELL NO. 107

STUART LANGLIE MATTIX UNIT  
LEA COUNTY, NEW MEXICO

RICHMOND DRILLING COMPANY  
STATE "A" WELL NO. 3

LOCATED UNIT N, SEC. 2-25S-37E



REFUSE EXAMINER UTZ  
WELL NO. 3  
CASE NO. 3803

CASE NO. 3803  
EXHIBIT NO. T-K

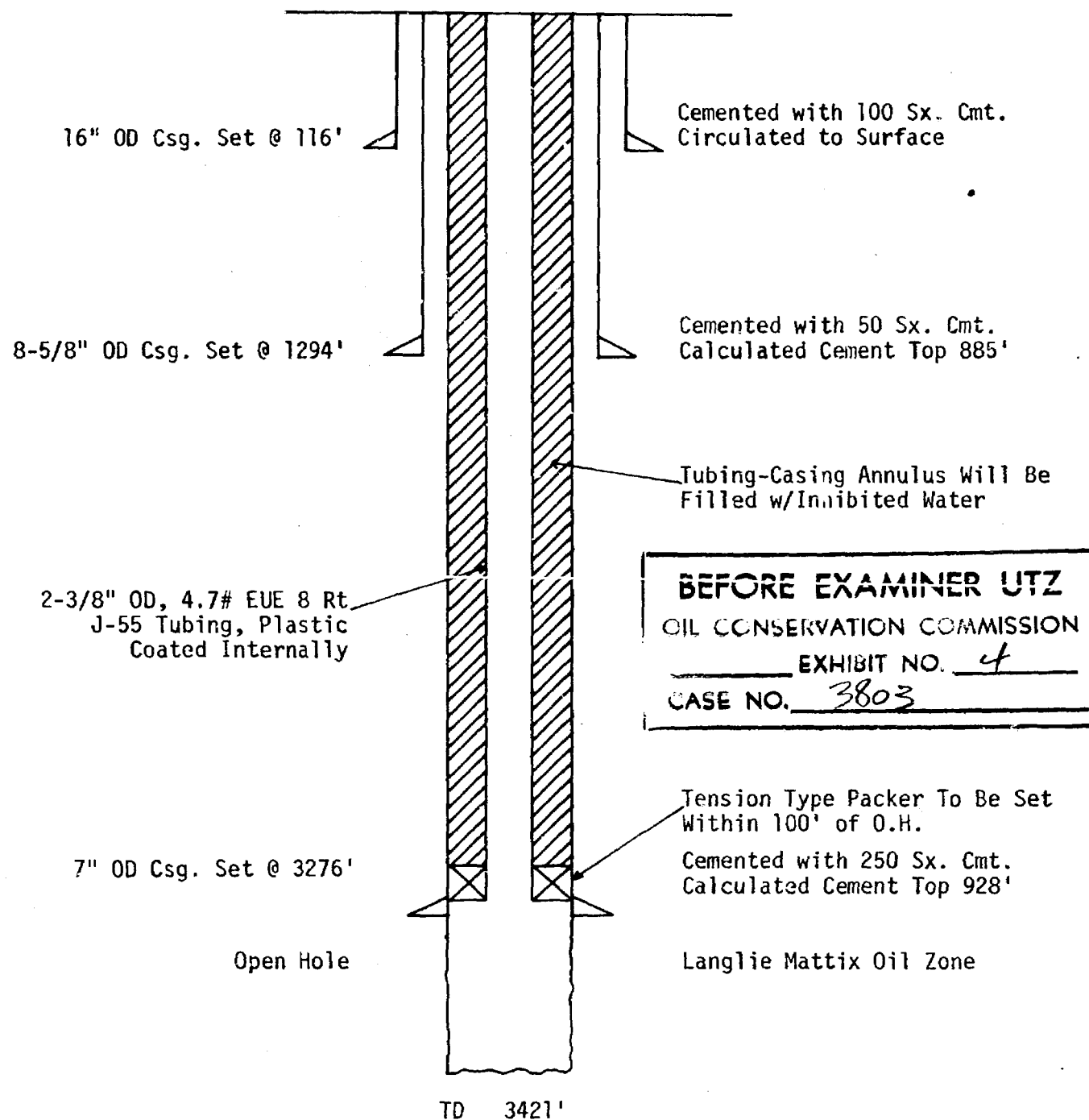


FIGURE 1X  
 DIAGRAMMATIC SKETCH  
 PROPOSED INJECTION WELL NO. 103

STUART LANGLEIE MATTIX UNIT  
 LEA COUNTY, NEW MEXICO

SKELLY OIL COMPANY  
 STATE "L" WELL NO. 2

LOCATED UNIT F, SEC. 2-25S-37E



**BEFORE EXAMINER UTZ**  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. 4  
 CASE NO. 3803

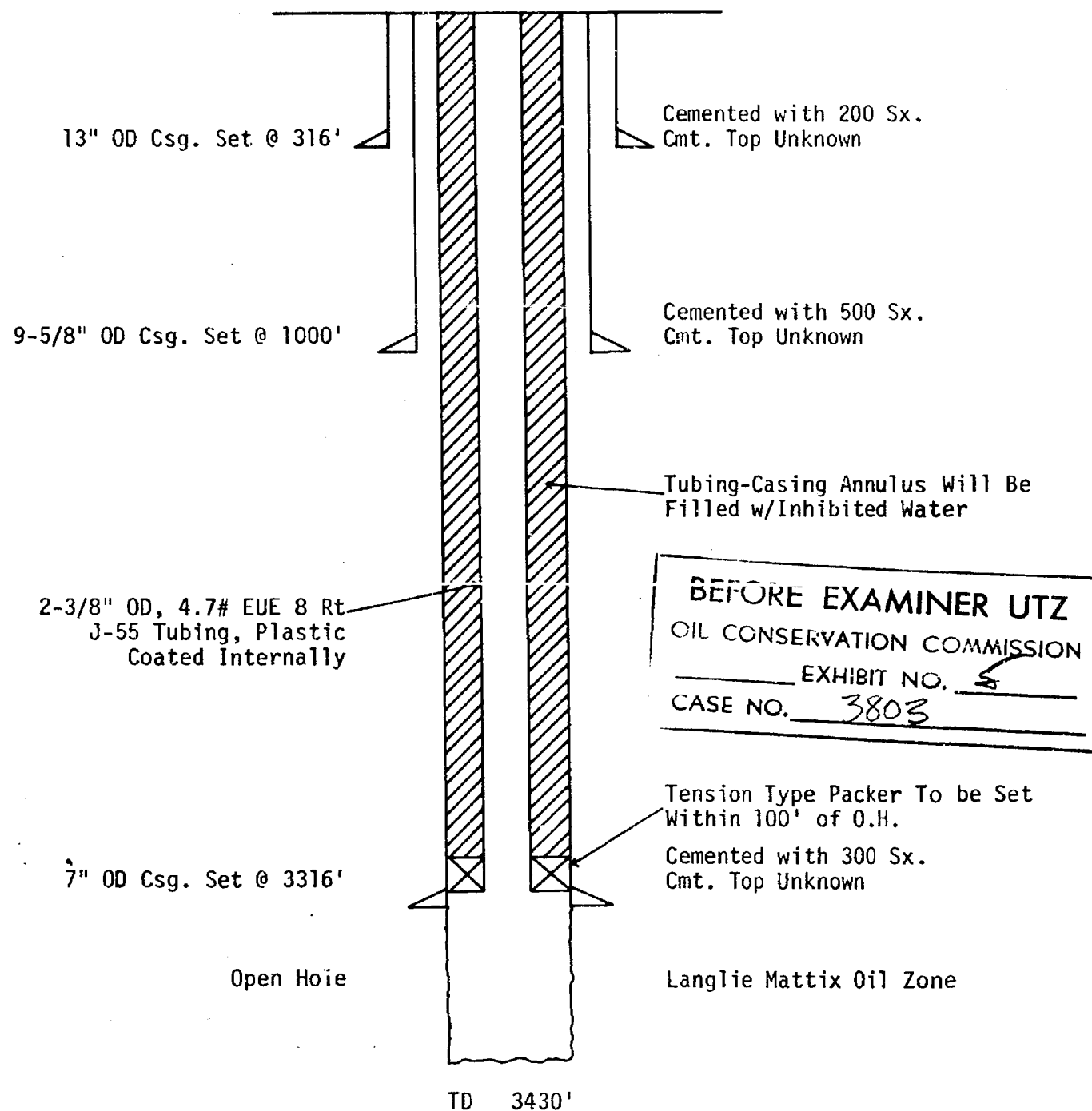
CASE NO. 3803  
 EXHIBIT NO. 1-L

FIGURE X  
DIAGRAMMATIC SKETCH  
PROPOSED INJECTION WELL NO. 120

STUART LANGLIE MATTIX UNIT  
LEA COUNTY, NEW MEXICO

UNION TEXAS PETROLEUM  
STUART WELL NO. 5

LOCATED UNIT F, SEC. 11-25S-3/E



CASE NO. 3803  
EXHIBIT NO. 1-M