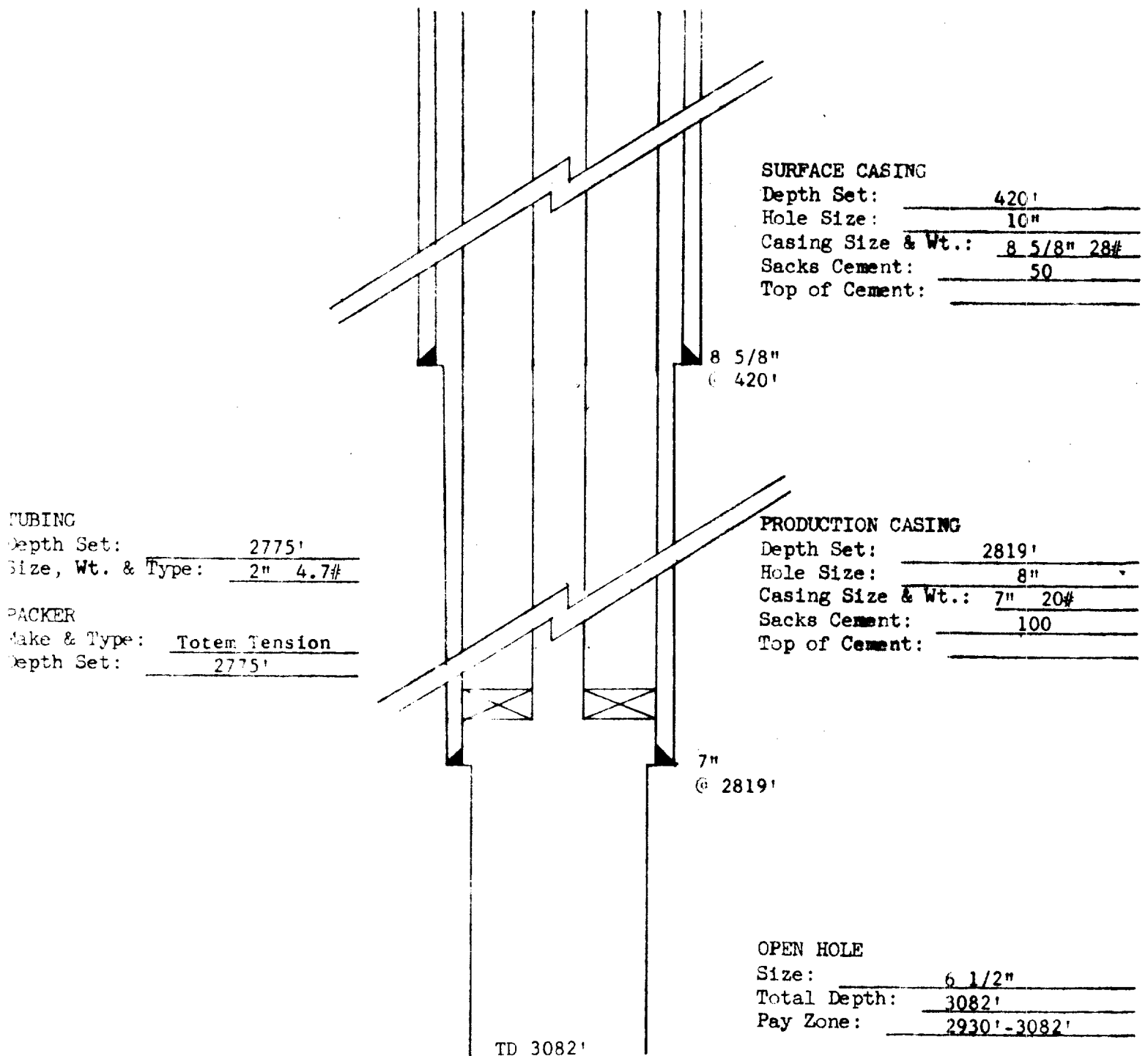


GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: Keely B #6
Location: 660 feet from North line and
1980 feet from West line of
Section 25 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico



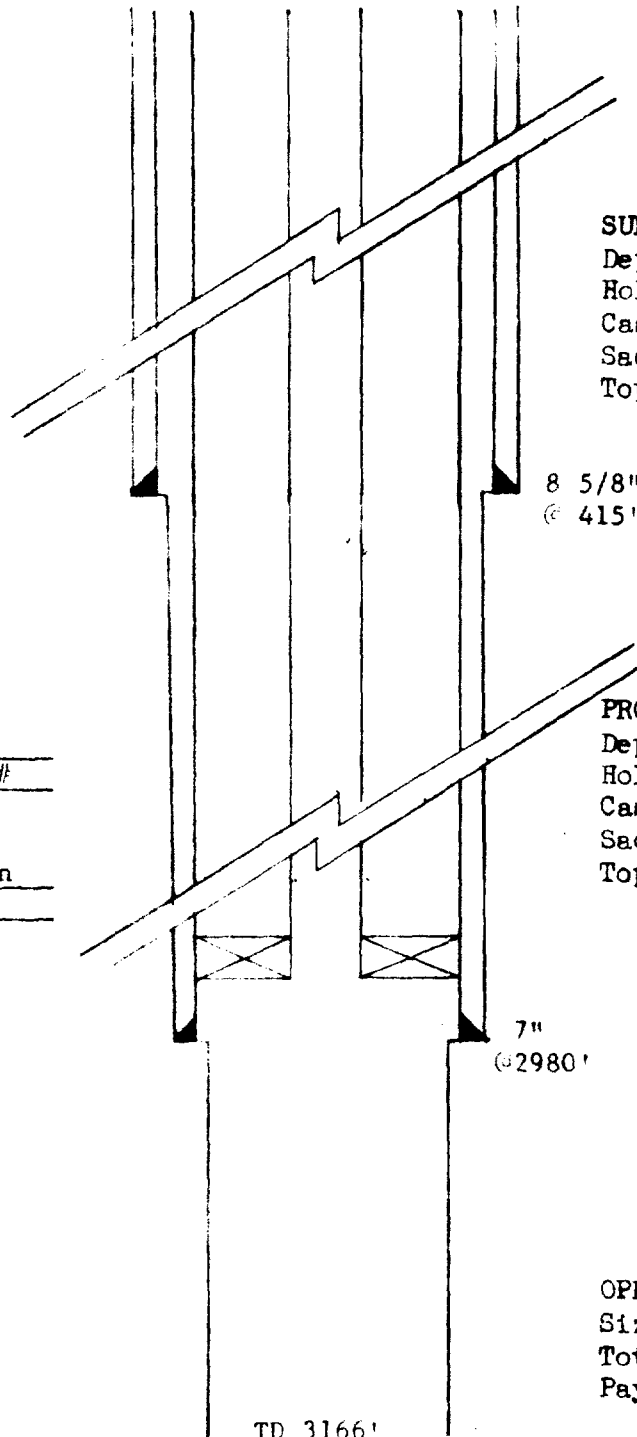
This well will probably be deepened to 3157' prior to injection.

BEFORE EXAMINER
OIL CO. OF TEXAS
Appn. NO. 2
CASE NO. 4029

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

20

Lease and Well No.: Keely B #10
Location: 1980 feet from South line and
660 feet from East line of
Section 26 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 415'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 50
Top of Cement:

8 5/8"
(@ 415')

PRODUCTION CASING

Depth Set: 2980'
Hole Size: 8"
Casing Size & Wt.: 7" 20#
Sacks Cement: 100
Top of Cement:

7"
(@ 2980')

OPEN HOLE

Size: 6 1/2"
Total Depth: 3166'
Pay Zone: 3000'-3140'

TUBING
Depth Set: 2950'
Size, Wt. & Type: 2" 4.7#

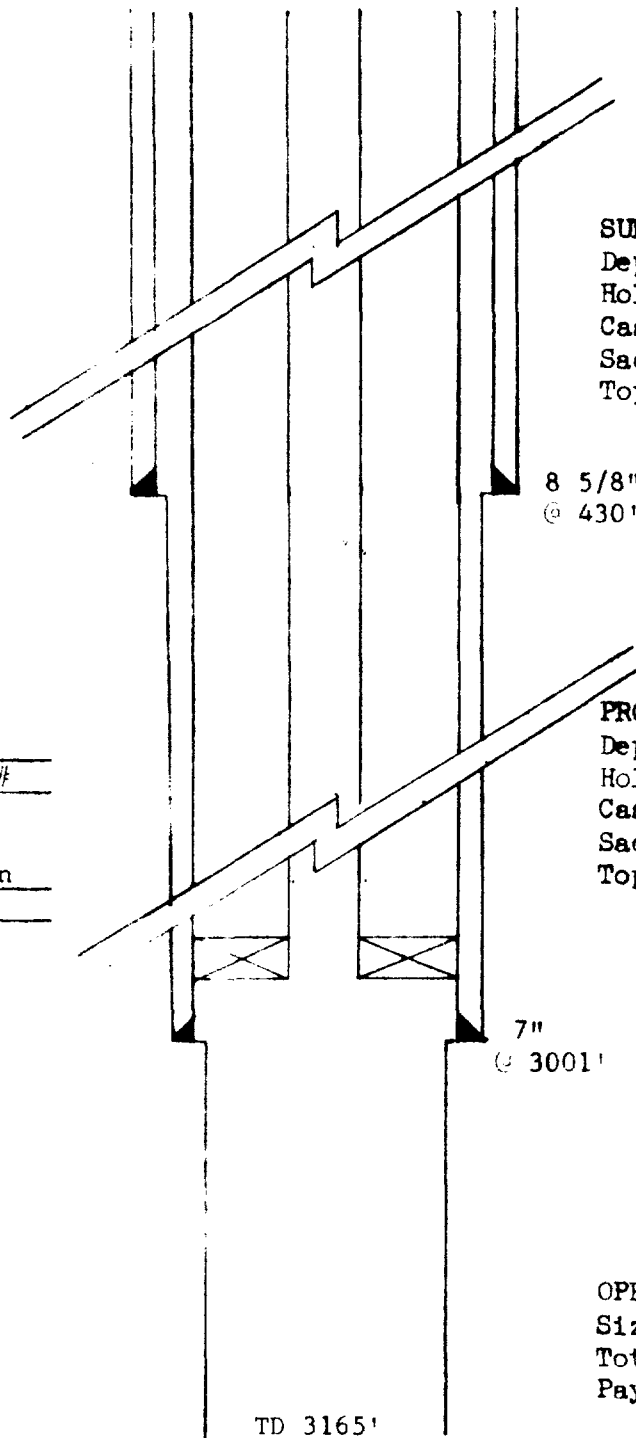
PACKER
Make & Type: Totem Tension
Depth Set: 2950'

TD 3166'

28

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: Keely C #10
 Location: 1980 feet from North line and
660 feet from West line of
 Section 25 TWP 17S RGE 29E
 N.M.P.M. Eddy County, New Mexico



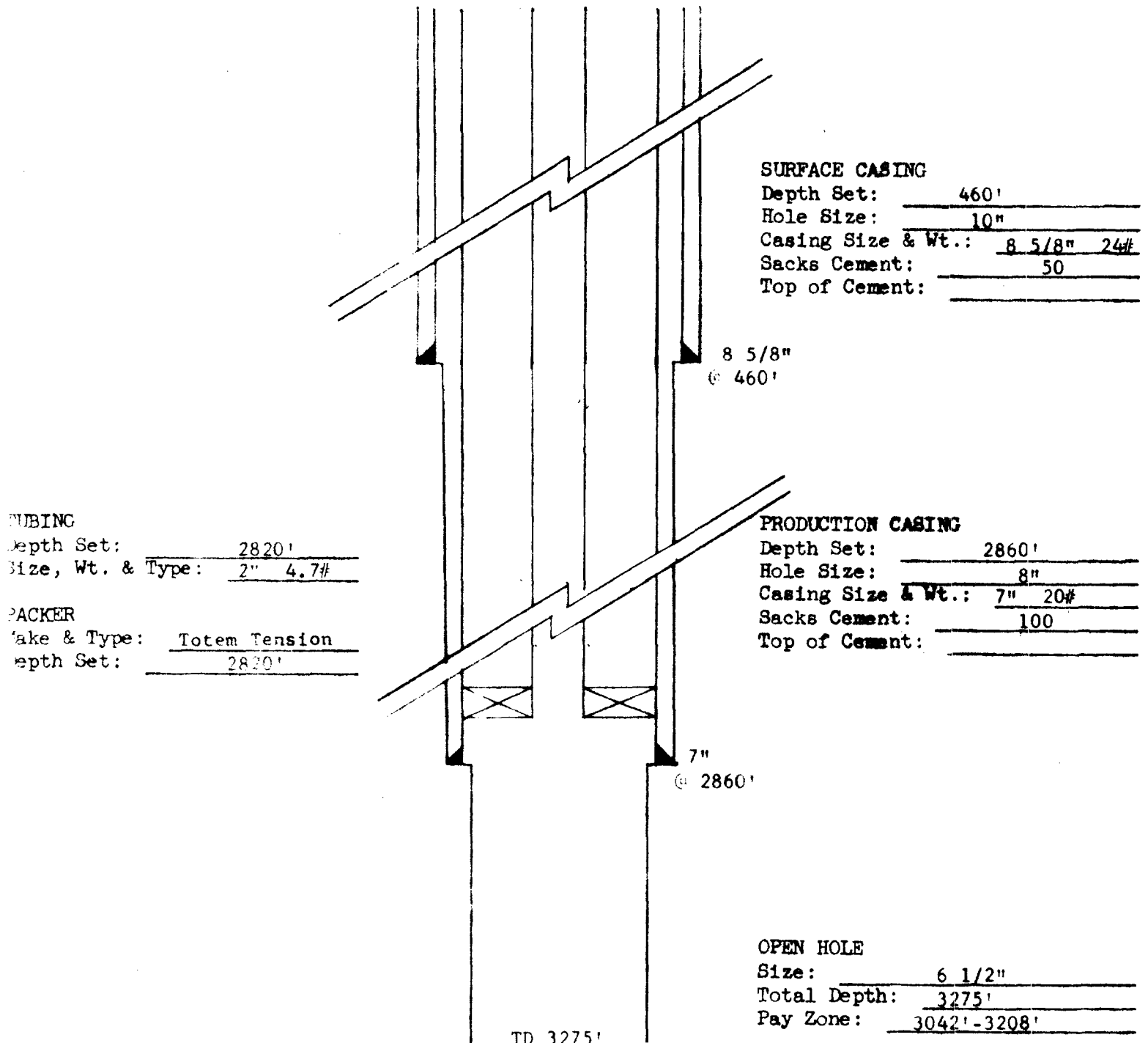
TUBING
 Depth Set: 2960'
 Size, Wt. & Type: 2" 4.7#

PACKER
 Make & Type: Totem Tension
 Depth Set: 2960'

26

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

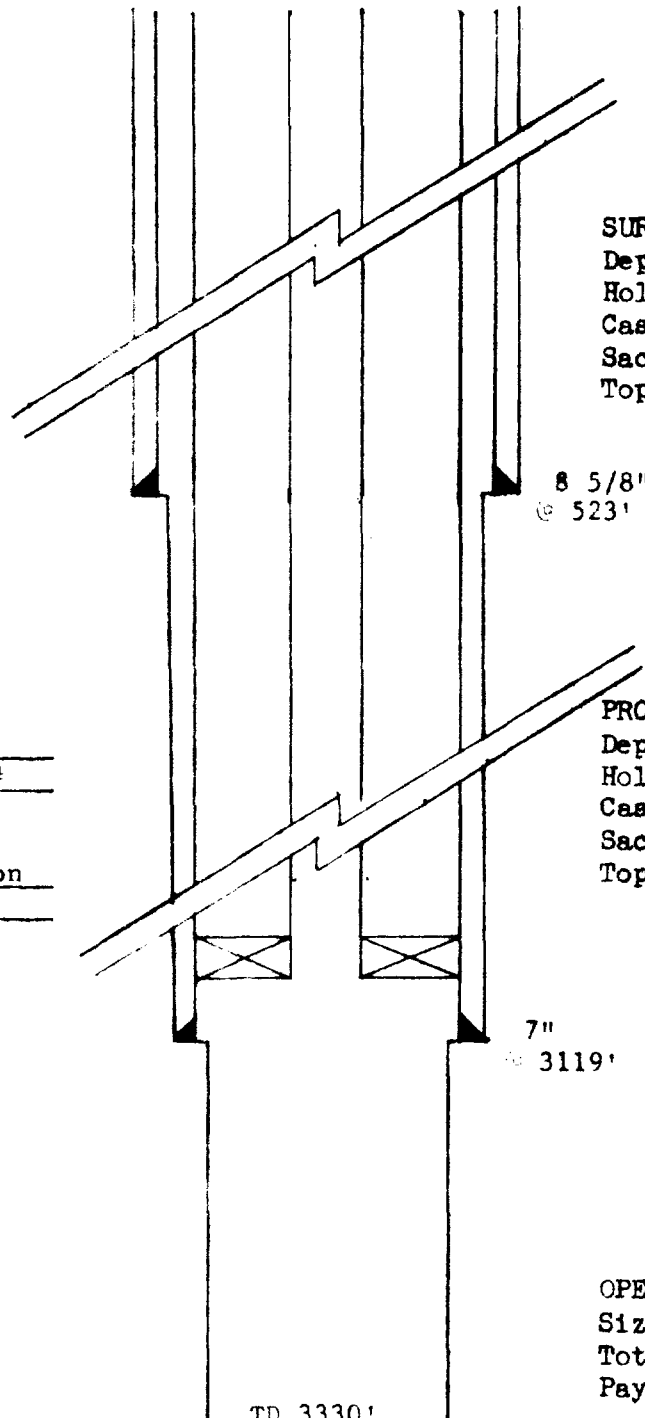
Lease and Well No.: Keely C #12
 Location: 1980' feet from North line and
1980' feet from East line of
 Section 25 TWP 17S RGE 29E
 N.M.P.M. Eddy County, New Mexico



GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

28

Lease and Well No.: Keely C #20
Location: 1980 feet from South line and
660 feet from East line of
Section 25 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 523'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 100
Top of Cement: _____

8 5/8"
@ 523'

PRODUCTION CASING

Depth Set: 3119'
Hole Size: 8"
Casing Size & Wt.: 7" 20#
Sacks Cement: 100
Top of Cement: _____

7"
@ 3119'

OPEN HOLE

Size: 6 1/2"
Total Depth: 3330'
Pay Zone: 3179'-3208'

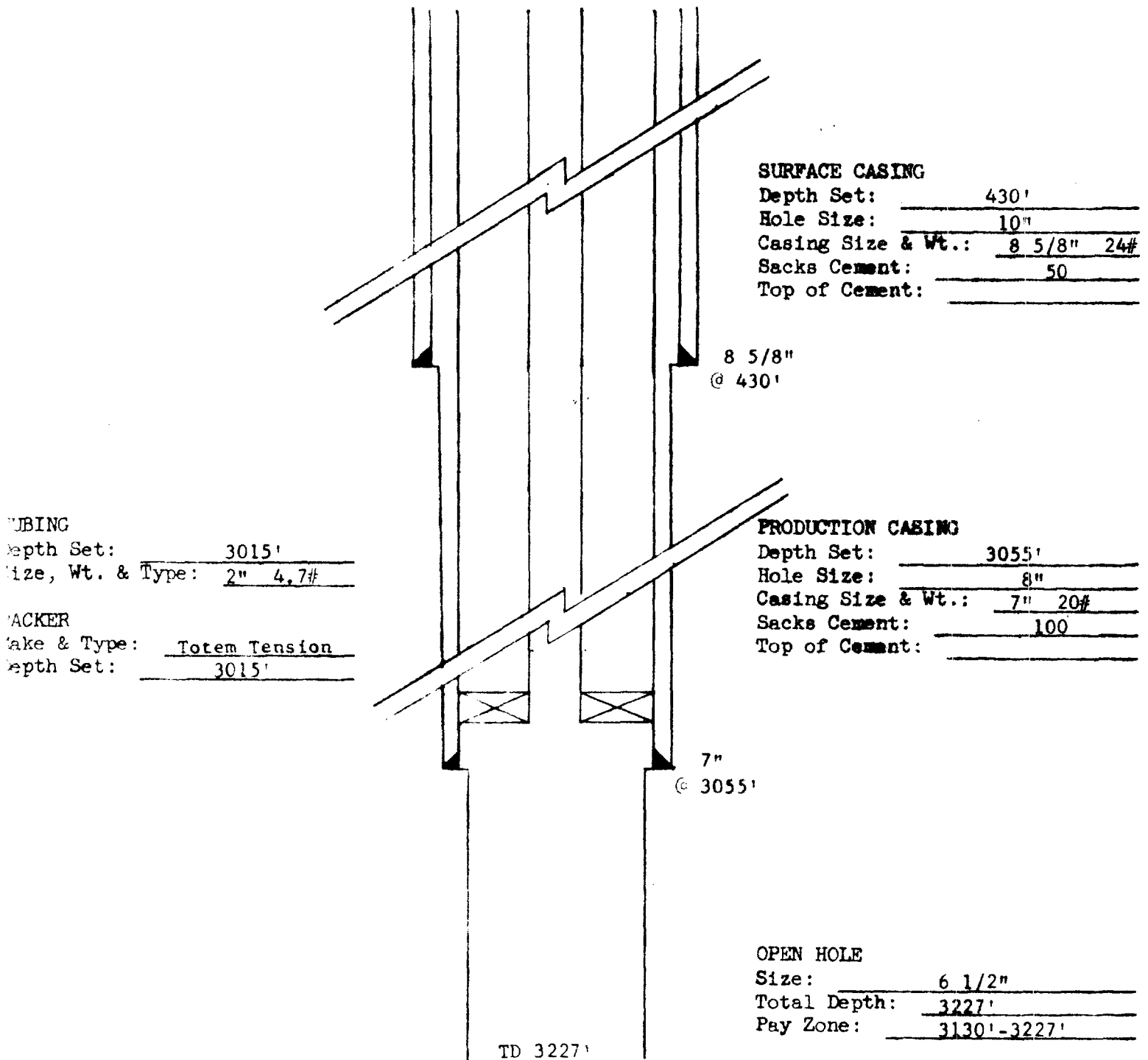
TUBING
Depth Set: 3080'
Size, Wt. & Type: 2" 4.7#
PACKER
Make & Type: Totem Tension
Depth Set: 3080'

TD 3330'

2

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: Keely C #23
 Location: 660 feet from South line and
660 feet from West line of
 Section 25 TWP 17S RGE 29E
 N.M.P.M. Eddy County, New Mexico

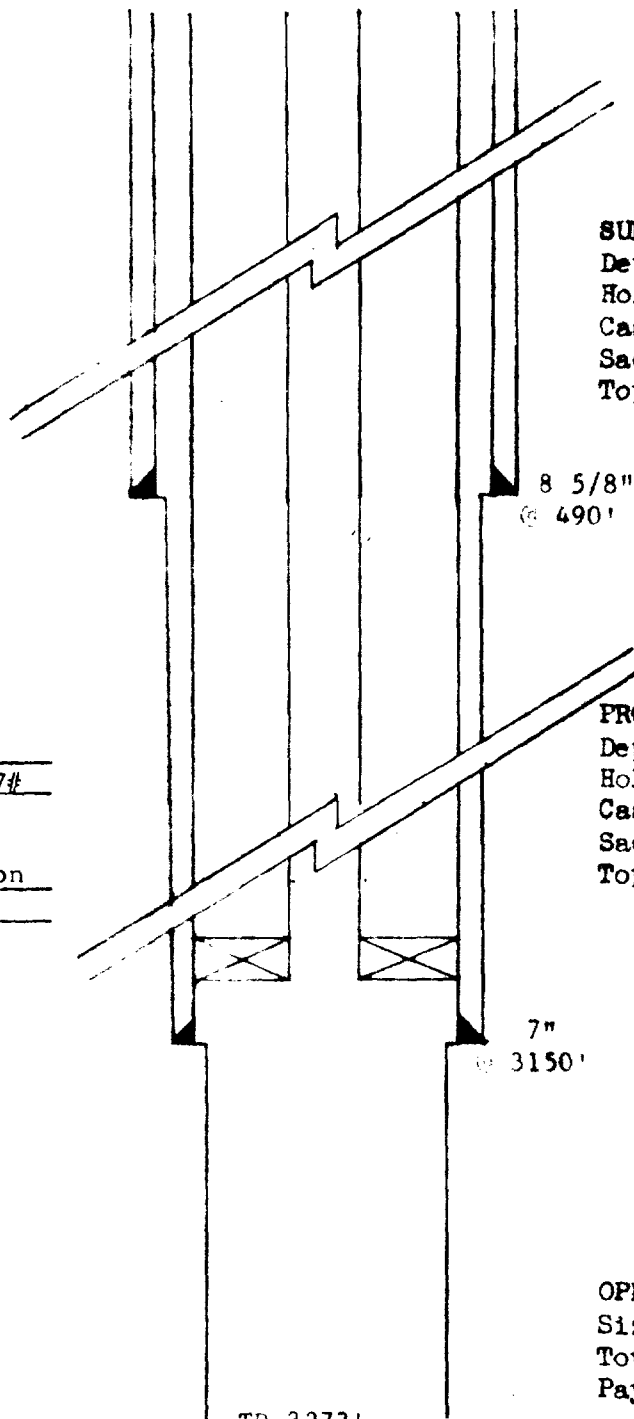


This well will probably be deepened 75' to 3302'.

2/

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: _____ State #2
Location: _____ 660 feet from _____ North line and
_____ 1980 feet from _____ West line of
Section _____ 36 TWP _____ 17S RGE _____ 29E
N.M.P.M. _____ Eddy _____ County, New Mexico



SURFACE CASING

Depth Set: _____ 490'
Hole Size: _____ 10"
Casing Size & Wt.: _____ 8 5/8" 24#
Sacks Cement: _____ 50
Top of Cement: _____

8 5/8"
@ 490'

PRODUCTION CASING

Depth Set: _____ 3150'
Hole Size: _____ 8"
Casing Size & Wt.: _____ 7" 20#
Sacks Cement: _____ 100
Top of Cement: _____

7"
@ 3150'

OPEN HOLE

Size: _____ 6 1/2"
Total Depth: _____ 3273'
Pay Zone: _____ 3160'-3245'

PIPELINE

Depth Set: _____ 3110'
Size, Wt. & Type: _____ 2" 4.7#

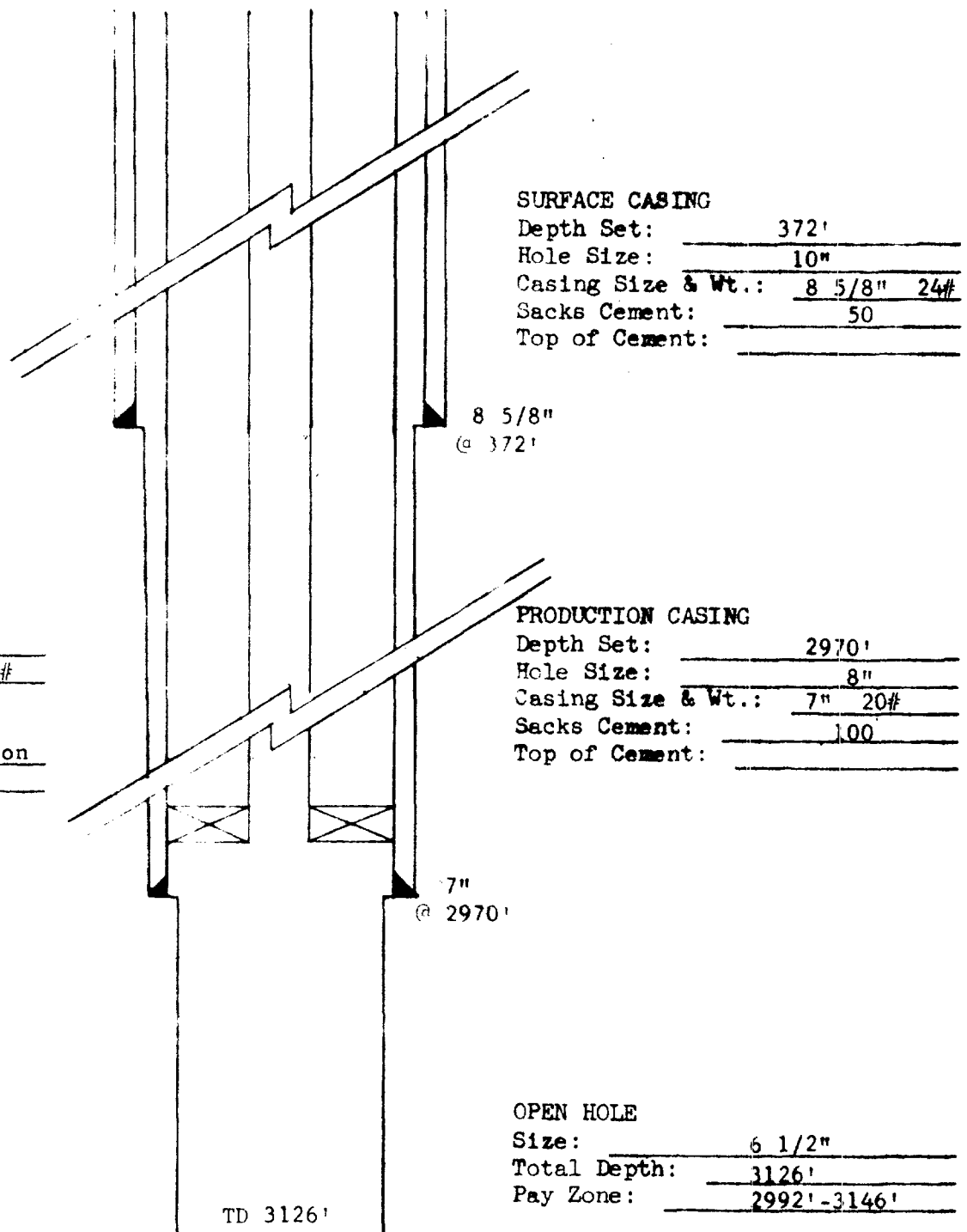
PACKER

Make & Type: _____ Totem Tension
Depth Set: _____ 3110'

29

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and well No.: Keely B #11
 Location: 960 feet from South line and
1980 feet from East line of
Section 26 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico

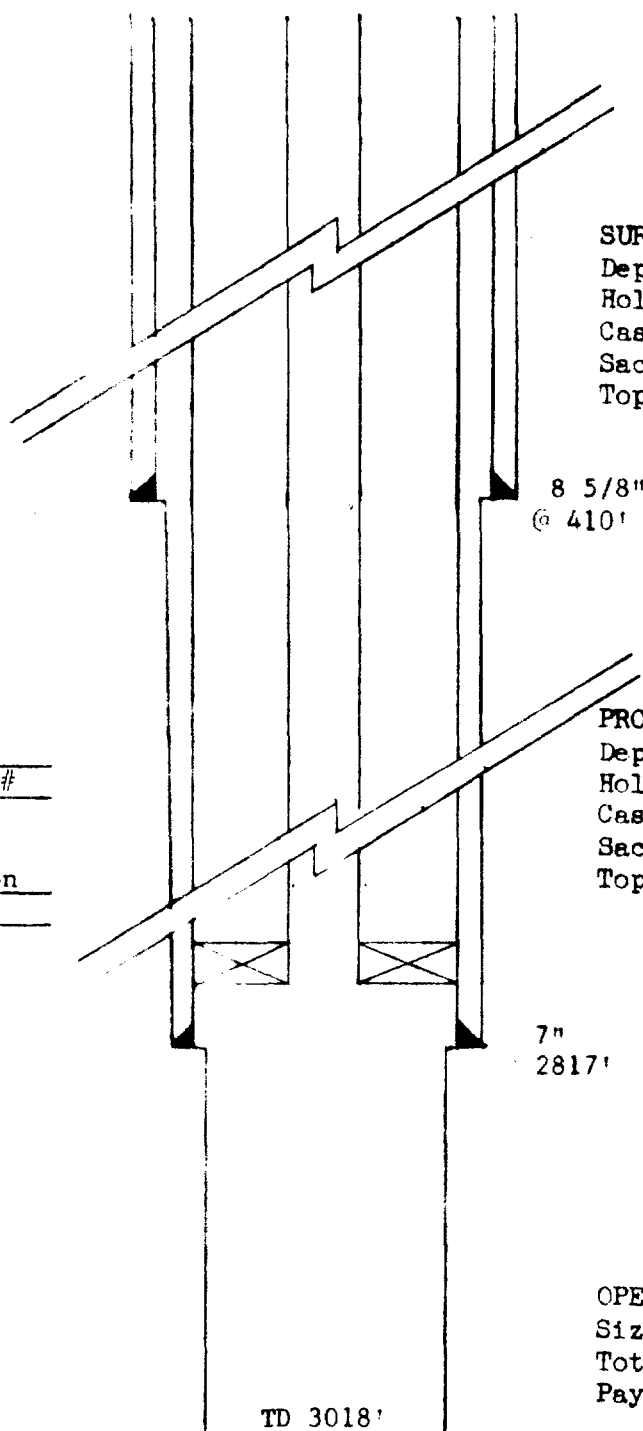


This well will probably be deepened 75' to 3201'.

2 R

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: Keely C #16
Location: 1980 feet from South line and
1980 feet from West line of
Section 26 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 410'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 100
Top of Cement: _____

8 5/8"
(@ 410')

PRODUCTION CASING

Depth Set: 2817'
Hole Size: 8"
Casing Size & Wt.: 7" 24#
Sacks Cement: 100
Top of Cement: _____

7"
2817'

OPEN HOLE

Size: 6 1/2"
Total Depth: 3018'
Pay Zone: 2840'-2993'

TD 3018'

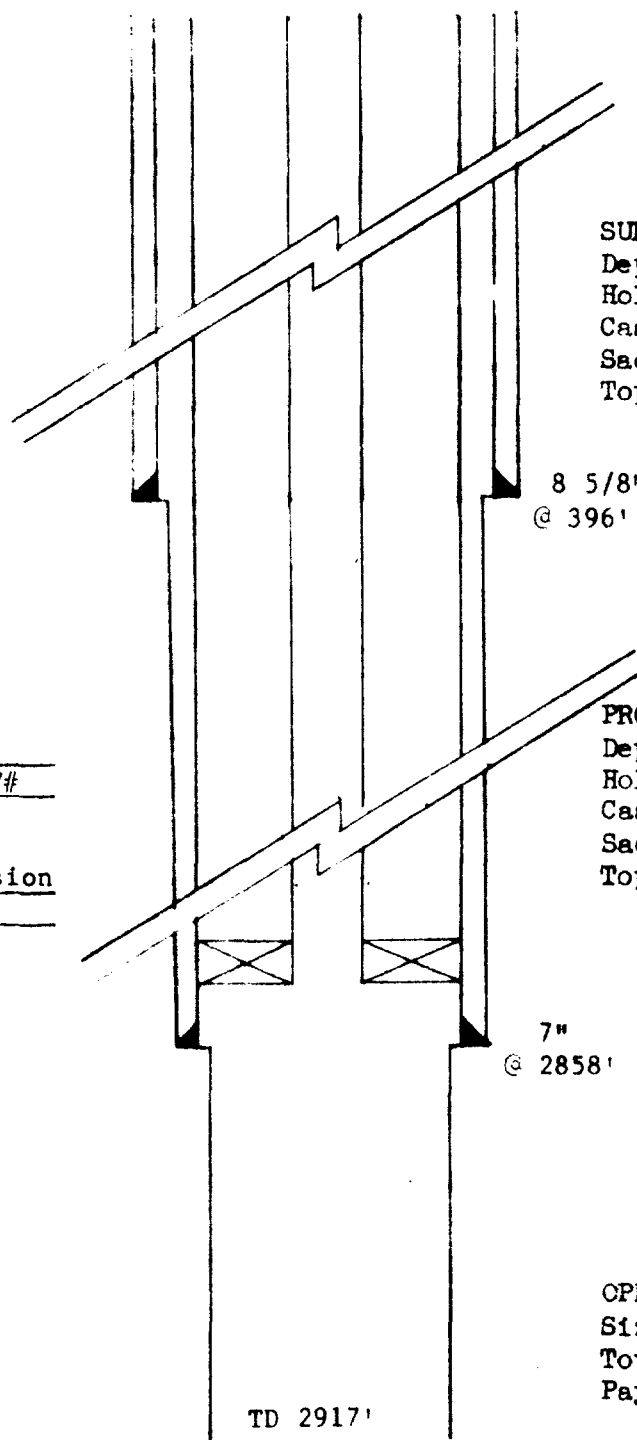
TUBING
Depth Set: 2780'
Size, Wt. & Type: 2" 4.7#

PACKER
Make & Type: Totem Tension
Depth Set: 2780'

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

21

Lease and Well No.: Keely C #21
Location: 660 feet from South line and
660 feet from West line of
Section 26 TWP 17S RCE 29E
S.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 396'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 150
Top of Cement:

8 5/8"
@ 396'

PRODUCTION CASING

Depth Set: 2858'
Hole Size: 8"
Casing Size & Wt.: 7" 24#
Sacks Cement: 100
Top of Cement:

7"
@ 2858'

OPEN HOLE

Size: 6 1/2"
Total Depth: 2917'
Pay Zone: 2902'-2917'

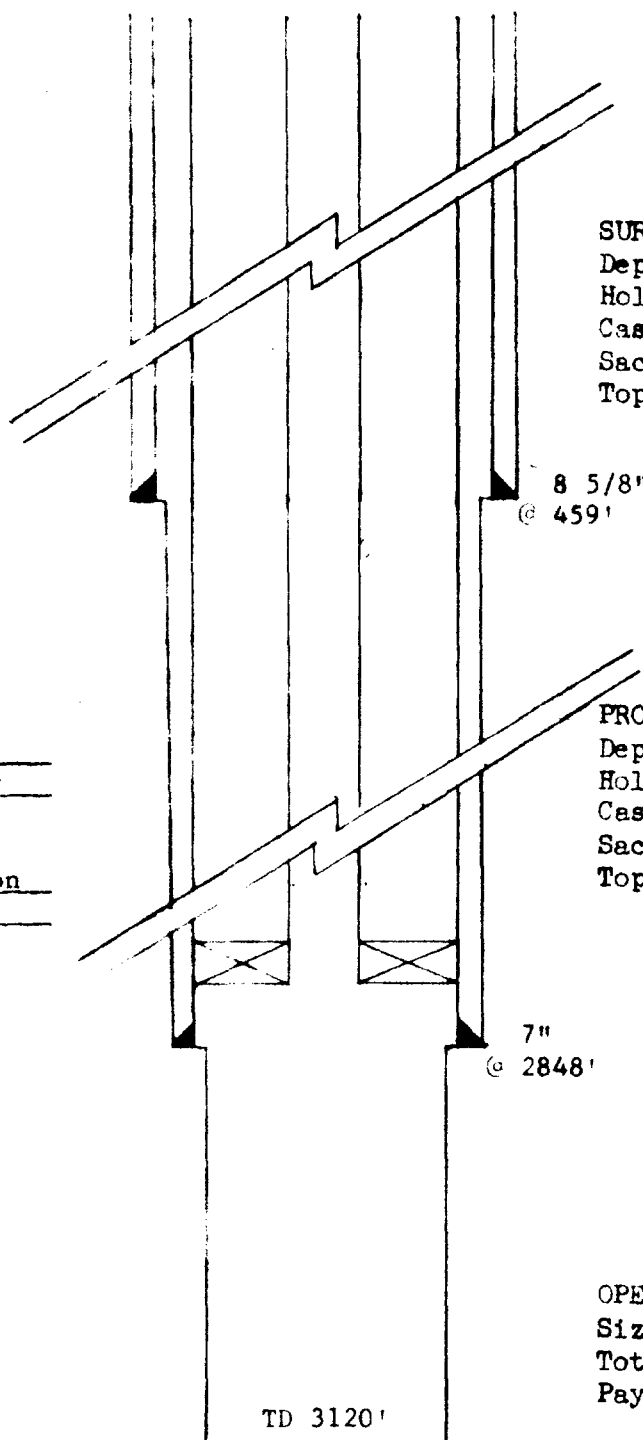
TD 2917'

This well will probably be deepened 150' to 3067'.

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

2 J

Lease and Well No.: Keely C. #8
Location: 660 feet from North line and
660 feet from East line of
Section 25 TWP 17S RGE 29E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 459'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 50
Top of Cement:

8 5/8"
(@ 459')

PRODUCTION CASING

Depth Set: 2848'
Hole Size: 8"
Casing Size & Wt.: 7" 20#
Sacks Cement: 100
Top of Cement:

7"
(@ 2848')

OPEN HOLE

Size: 6 1/2"
Total Depth: 3120'
Pay Zone: 3027'-3102'

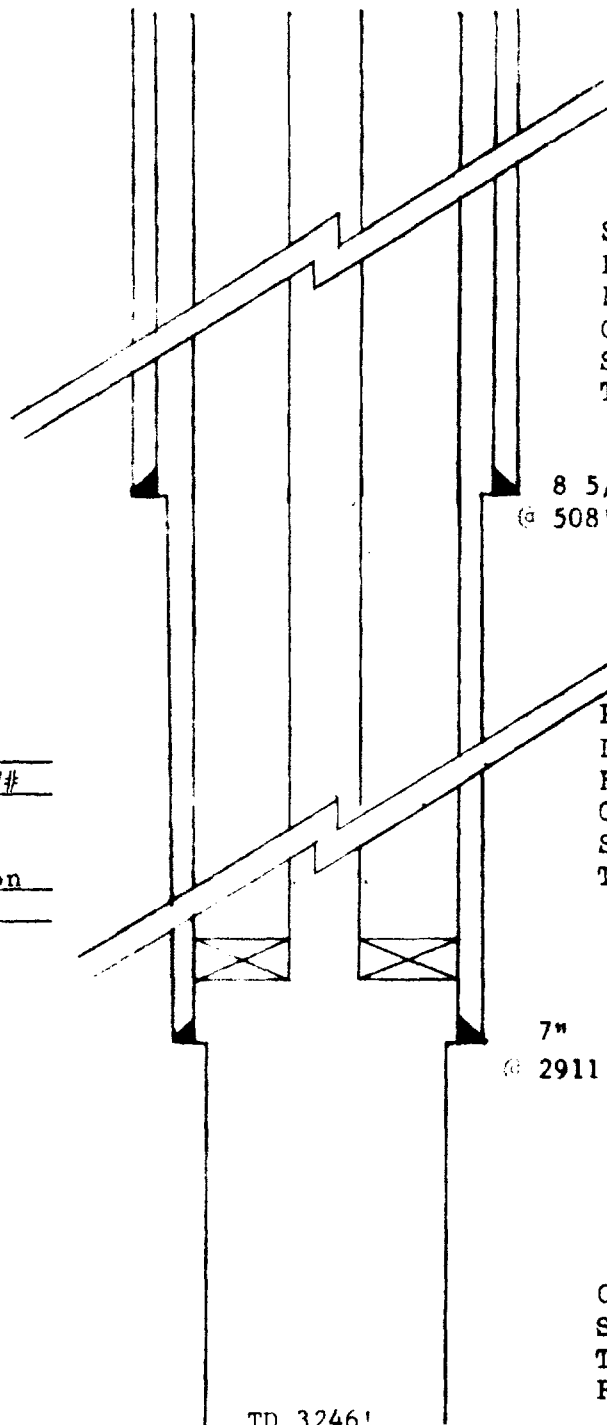
TD 3120'

This well will probably be deepened 75' to 3195'.

2-6

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

Lease and Well No.: Burch E. #10
Location: 660 feet from North line and
1980 feet from West line of
Section 30 TWP 17S RGE 30E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 508'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 50
Top of Cement: _____

8 5/8"
(@ 508')

PRODUCTION CASING

Depth Set: 2911'
Hole Size: 8"
Casing Size & Wt.: 7" 20#
Sacks Cement: 100
Top of Cement: _____

7"
(@ 2911')

OPEN HOLE

Size: 6 1/2"
Total Depth: 3246'
Pay Zone: 3121' - 3240'

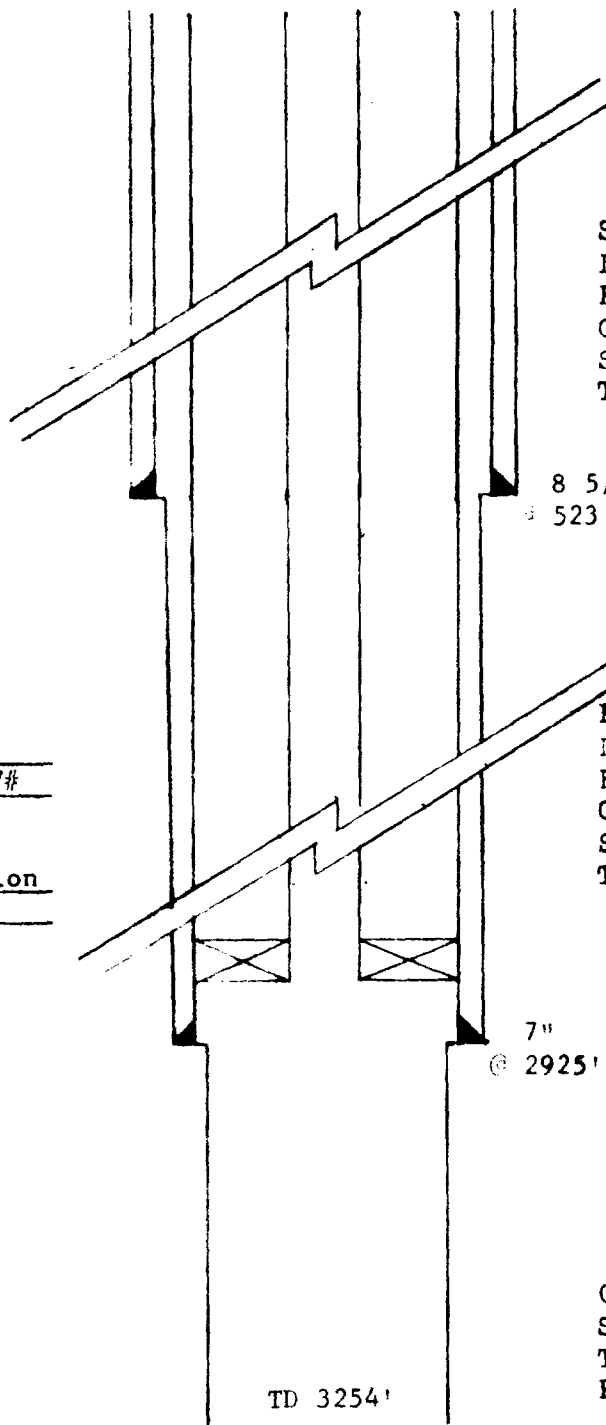
TD 3246'

PIPELINE
Depth Set: 2875'
Size, Wt. & Type: 2" 4.7#
PACKER
Make & Type: Totem Tension
Depth Set: 2875'

GENERAL AMERICAN OIL COMPANY OF TEXAS
SCHEMATIC DIAGRAM OF
PROPOSED INJECTION WELL

2

Lease and Well No.: Burch B #11
Location: 1980 feet from North line and
660 feet from West line of
Section 30 TWP 17S RGE 30E
N.M.P.M. Eddy County, New Mexico



SURFACE CASING

Depth Set: 523'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 24#
Sacks Cement: 50
Top of Cement: _____

8 5/8"
@ 523'

PRODUCTION CASING

Depth Set: 2925'
Hole Size: 8"
Casing Size & Wt.: 7" 20#
Sacks Cement: 100
Top of Cement: _____

7"
@ 2925'

OPEN HOLE

Size: 6 1/2"
Total Depth: 3254'
Pay Zone: 3136'-3250'

TD 3254'

PIPELINE
Depth Set: 2890'
Size, Wt. & Type: 2" 4.7#
PACKER
Size & Type: Totem Tension
Depth Set: 2890'

STAGE II

OPERATOR:	GAOC	GAOC	GAOC	GAOC	GAOC
WELL NO.:	Keely C #23	State #2	Keely B #11	Keely C #16	Keely C #21
LOCATION:	660 FSL & 660 FWL Sec 25 - 17S - 29E	660 FNL & 1980 FWL Sec 36 - 17S - 29E	660 FSL & 1980 FEL Sec 26 - 17S - 29E	1980 FSL & 1980 FWL Sec 26 - 17S - 29E	660 FSL & 660 FWL Sec 26 - 17S - 29E
ELEVATION:	3579'	3575'	3573'	3575'	3568'
COMPLETION DATA:					
TOTAL DEPTH:	3227'	3273'	3126'	3018'	2917'
P.B. TOTAL DEPTH:					
SURFACE CASING @:	430'	490'	372'	410'	396'
SIZE & WL.:	8 5/8" 24#	8 5/8" 24#	8 5/8" 24#	8 5/8" 24#	8 5/8" 24#
NO. SACKS:	50	50	50	50	50
PRODUCTION CASING @:	--	3150'	2970'	2817'	2858'
SIZE & WT.:	7" 20#	7" 20#	7" 20#	7" 24#	7" 24#
NO. SACKS:	100	100	100	100	100
PRODUCING ZONE:	San Andres	San Andres	San Andres	San Andres	San Andres
INTERVAL:	3130'-3227'	3160'-3245'	2992'-3146'	2840'-2993'	2902'-2917'
TREATMENT RECORD:					
TYPE TREATMENT:	Acid	Acid	Acid	Acid	Acid
INTERVAL:	3055'-3227'	3200'-3259'	2970'-3126'	2817'-3018'	2858'-2917'
VOLUME:	2 Stages Totaling 6000 Gallons 20% HCL Acid	3 Stages Totaling 10300 Gallons 20% HCL Acid	3 Stages of 20% Acid Totaling 7500 Gallons	Acidized with 4000 Gallons 20% HCL	Acidized 2000 Gallons 20% HCL
REMARKS:	This well will probably be deepened 75' to 3302'.		This well will probably be deepened 75' to 3201'.		This well will probably be deepened 150' to 3067'.

STAGE III

OPERATOR:	GAOC	GAOC	GAOC
WELL NO.:	Keely C #8	Burch B #10	Burch B #11
LOCATION:	660 FNL & 660 FEL	660 FNL & 1980 FWL	1980 FNL & 660 FWL
ELEVATION:	Sec 25 - 17S - 29E 3602'	Sec 30 - 17S - 30E 3612'	Sec 30 - 17S - 30E 3607'
COMPLETION DATA:			
TOTAL DEPTH:	3120'	3246'	3254'
P.B. TOTAL DEPTH:			
SURFACE CASING (ø):	459'	508'	523'
SIZE & WT.:	8 5/8" 24#	8 5/8" 24#	8 5/8" 24#
NO. SACKS:	50	50	50
PRODUCTION CASING (ø):	2848'	2911'	2925'
SIZE & WT.:	7" 20#	7" 20#	7" 20#
NO. SACKS:	100	100	100
PRODUCING ZONE:	San Andres	San Andres	San Andres
INTERVAL:	3027' - 3102'	3121' - 3240'	3136' - 3250'
TREATMENT RECORD:			
TYPE TREATMENT:	Acid	Acid	Acid
INTERVAL:	2848' - 3120'	2911' - 3240'	3119' - 3254'
VOLUME:	Acidized with 1500 Gallons of 20% HCL	2 Stages Totaling 4500 Gallons 20% HCL Acid	2 Stages Totaling 5500 Gallons 20% HCL Acid
REMARKS:	This well will probably be deepened 75' to 3195'.		

GRAYBURG COOPERATIVE AND UNIT AGREEMENT (1-370)
EDDY COUNTY, NEW MEXICO

GRAYBURG ZONE: SUMMARY OF OPERATIONS FOR THE PERIOD JANUARY 1, 1968 THROUGH NOVEMBER 30, 1968 AND AMENDMENT TO ORIGINAL PLAN OF OPERATIONS COVERING THE PERIOD DECEMBER 1, 1968 THROUGH DECEMBER 31, 1969.

TO: Mr. John A. Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

It is intended by General American Oil Company of Texas, the Unit Operator designated for the Grayburg Cooperative and Unit Agreement, Eddy County, New Mexico, that the Plan of Operation for the Grayburg Zone under the Grayburg Cooperative and Unit Agreement, Originally approved by the Oil and Gas Supervisor on April 6, 1944 shall remain in effect for the period December 1, 1968 through December 31, 1969 with the modifications and amendments contained herein.

1. **DEVELOPMENT TO DATE:** Cumulative oil production from 119 wells completed in the Grayburg Zone amounted to 11,132,534 barrels through November 30, 1968. There were 74,196 barrels of oil produced during eleven months of 1968 from 83 active wells.

2. **PLAN OF DEVELOPMENT:**

(a) **PROPOSED WELLS:**

There are no new wells proposed for 1969.

(b) **OPERATIONS OF WATERFLOOD PROJECT:**

Total water injected into the original pilot flood amounts to 1,633,800 barrels. Injection into the original pilot area has been temporarily discontinued but may be resumed at a later date. No water was injected into this area during 1968.

Operations of the Grayburg Jackson Pilot Waterflood #2 were continued during the first eleven months during 1968 with a cumulative injection to December 1, 1968 of 1,283,659 barrels. Injection has been into Keely C #18, Keely C #25 and Keely C #37.

(c) **EXPANSION OF PROJECT:**

The Operator plans to expand its waterflood project during 1969 to include 13 additional water injection wells. The expansion will be accomplished in three stages. Attached is a map showing the proposed first stage expansion in yellow which will include the conversion of seven wells to water injection. This stage will be instigated as soon as the project has been approved by the Oil Conservation Commission.

The second stage shown in brown would include the conversion of three additional wells to water injection and would be put into effect as soon as Sinclair converts their line wells to water injection.

The third stage shown in green will be converted to balance acreage swaps on leases which have overriding royalty and leases which do not have overriding royalty.

The Operator plans to seek approval from the New Mexico Oil Conservation Commission for this project at the earliest date possible. The Operator will seek to get all stages approved under one order. Providing cooperation with Sinclair can be finalized all stages should be completed during 1969.

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	4
CASE NO.	4029

MODIFICATION OF PLAN: With the approval of the Oil and Gas Supervisor, this plan may be modified from time to time by the Unit Operator to meet changed conditions to take advantage of information from deepening of any well and to meet changed conditions which may develop in the operation of the water injection program as outlined herein. The original Plan of Operation, with this modification to remain in effect through December 31, 1969 on or about which date the Unit Operator shall submit for approval of the Oil and Gas Supervisor, a new Plan of Operation or appropriate modification or amendment of the Plan for the calendar year 1970.

Respectfully submitted,

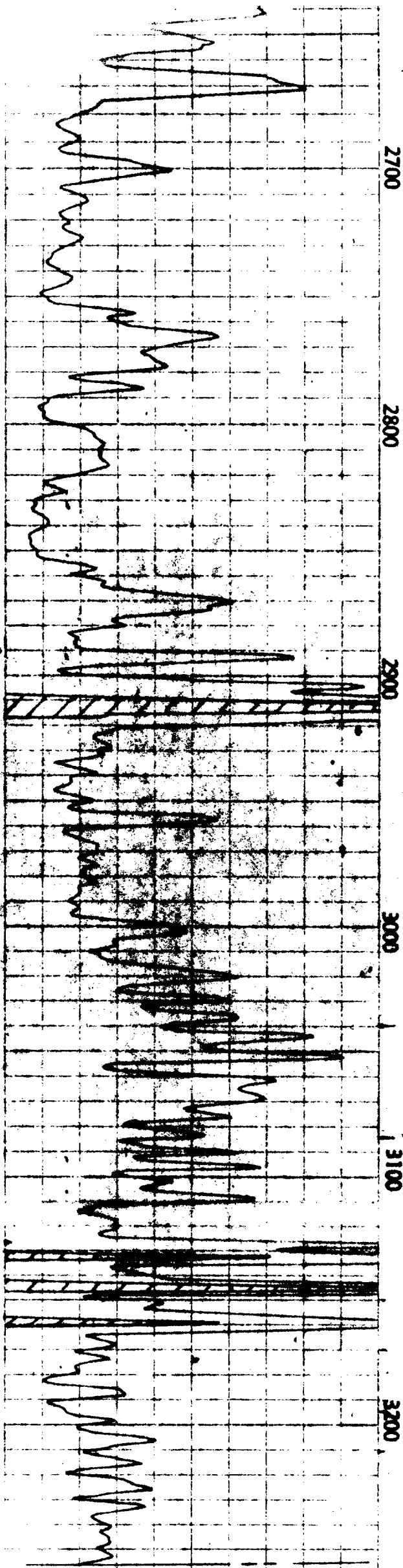
GENERAL AMERICAN OIL COMPANY OF TEXAS

By: W. E. Walter
W. E. Walter
District Superintendent

Dated this _____ day of _____, 1968

APPROVED this _____ day of _____, 19____

W. E. Walter
Regional Oil and Gas Supervisor
Roswell, New Mexico

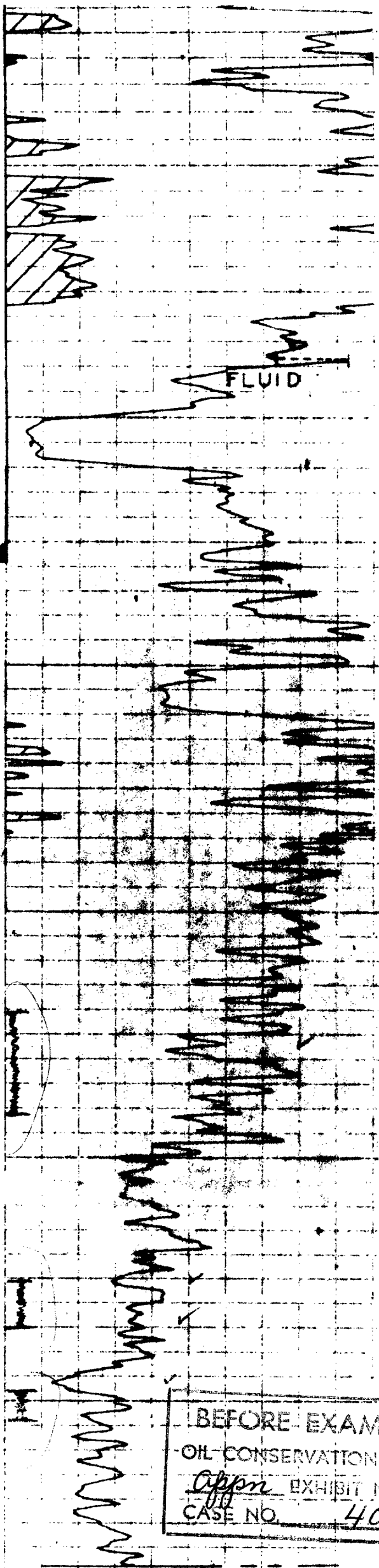


R. D. 3255

T. D. 3270

REELY C #12

SWELL OF NE1/4



R. D. 3268

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Open EXHIBIT NO. 5
CASE NO. 4029



SINCLAIR OIL CORPORATION

P. O. Box 1470
MIDLAND, TEXAS 79701

January 15, 1969

SOUTHERN REGION (WEST TEXAS)
DOMESTIC OIL & GAS DIVISION

General American Oil Company of Texas
P. O. Box 416
Loco Hills, New Mexico 88255

Attention Mr. Roy Crow

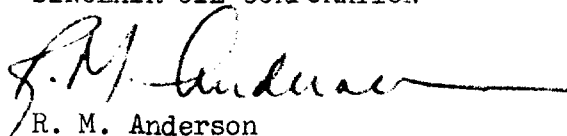
Gentlemen:

We have reviewed your proposed waterflood pattern submitted with your letter of January 9, 1969, concerning the expansion of your San Andres lime pilot flood in cooperation with our Robinson leases.

This is to advise that your plans appear to conform with Sinclair's proposed flood pattern and to advise that we have no objections to your application with the Oil Conservation Commission.

Yours very truly,

SINCLAIR OIL CORPORATION


R. M. Anderson

Region Regulatory Engineer

RMA/nr

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
<i>Appn</i>	EXHIBIT NO. <u>6</u>
CASE NO.	<u>4029</u>

LAW OFFICES OF
JOHN F. RUSSELL
412 HINKLE BUILDING
P. O. DRAWER 640
ROSWELL, NEW MEXICO 88201

January 15, 1969

TELEPHONE 622-4641
AREA CODE 505

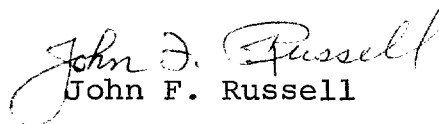
Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Re: General American Oil Co.
of Texas, Case No. 4029

Dear Mr. Porter:

I transmit herewith in triplicate four Exhibits, for
filing with the Application in the above numbered case.

Very truly yours,


John F. Russell

JFR:vj
Encls.

LAW OFFICES OF
JOHN F. RUSSELL
412 HINKLE BUILDING
P. O. DRAWER 640
ROSWELL, NEW MEXICO 88201

December 27, 1968

TELEPHONE 622-4341
AREA CODE 505

DEC 30 AM 8 19

Case 4029

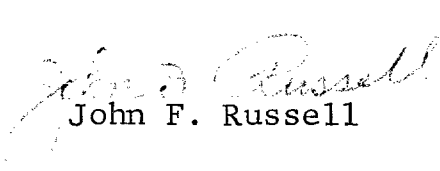
Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Porter:

I transmit herewith, in triplicate, the Application of General American Oil Company of Texas for an expansion of its waterflood project authorized under Order No. R-2324 entered in Case No. 2640.

The Application is being filed at this time in order to make the deadline for the January 22nd hearing. The Exhibits referred to in the Application will be forwarded immediately upon receipt.

Very truly yours,


John F. Russell

JFR:d
Enclosures

DOCKET MAILED

Date 1-5-69
31 816

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 24, 1969

**Mr. Jack Russell
Attorney at Law
Post Office Drawer 640
Roswell, New Mexico 88201**

Dear Sir:

Enclosed herewith is Commission Order No. R-3664, entered in Case No. 4029, approving the expansion of the General American Keely "C" Waterflood Project.

Additional injection is to be through the 13 newly authorized water injection wells, each of which shall be equipped with a string of tubing set in a packer located not more than 50 feet above the casing shoe. It is our understanding that all of the injection wells are open-hole completions.

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 1960 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less if all of the leases were unitized or otherwise consolidated into a single project area.

As you know, however, Commission Order No. 802 dated November 19, 1948, established certain unitized tracts for proration purposes in this project area which followed the lease lines for the Keely B, Keely C, Burch B, and Burch C leases. The waterflood project allowables for each of the unitized tracts are as follows:

Unit W-3 project area SW/4 of Section 26: 210 barrels

**Unit G-5 project area S/2 NE/4 and SE/4 of Section
26, N/2 NW/4 of Section 25, and S/2 SW/4 of Section
24: 532 barrels**

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

-2-

Mr. Jack Russell
Attorney at Law
Roswell, New Mexico

January 24, 1969

Unit W-4 project area S/2 SE/4 of Section 24,
NE/4, N/2 SE/4, SW/4 SE/4, S/2 NW/4, and SW/4
of Section 25: 784 barrels

Unit G-2 project area S/2 SW/4 of Section 19
and NW/4 of Section 30: 308 barrels

C
O
The difference in the sum of the allowables for the four projects and the total allowable which would be assigned if the entire project area were unitized (1834 barrels vs. 1960 barrels) results from loss of allowable by the injection well in the NE/4 NW/4 of Section 36 (there is no producing well on this lease to assign the allowable to) and no waterflood allowable being assigned to the two wells in the SW/4 SE/4 of Section 19 and the NW/4 NE/4 of Section 30 (there is no injection well on this lease, the Burch C (unitized area W-1).

P
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.

Y
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 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/ir
Enclosure

cc: Oil Conservation Commission
Hobbs and Artesia, New Mexico