

GENERAL AMERICAN OIL COMPANY OF TEXAS

DISTRICT OFFICE
BOX 416
LOCO HILLS, NEW MEXICO 88253
March 27, 1968

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

WFX-287
New Apr 16

Dear Sir:

General American Oil Company of Texas hereby makes application for administrative approval to convert its Bosworth #2, Brewer #7, Brewer #10 and Brewer #16 wells to water injection in its East High Lonesome Penrose Sand Flood Unit. This flood was approved under Order No. R-2443 and expanded under Order No. WFX 235.

Attached in accordance with Rule 701 are the following:

- (1.) A plat showing the proposed injection wells and all wells within a two mile radius and the formations from which they produce or have produced.
- (2.) A portion of the available logs on the proposed injection wells.
- (3.) A diagrammatic sketch of the proposed injection wells showing casing, cement, tubing, packer, open hole, ect.
- (4.) A copy of the letter sent to the Office of the State Engineer.
- (5.) Form C-116 showing response to proposed wells from water injection.

By converting these wells it is felt that a better sweep efficiency can be obtained to the remaining producing wells. All four of these wells have become such high water cut wells that they are no longer economical to operate as producers. These conversions should give us a better sweep from the south side of this project.

Page -2-
March 27, 1968

The water will be injected into the Penrose Sand just below 2000'. The water injected will be a mixture of Caprock water and produced water. Probable injection rates will be about 200 barrels per day.

A copy of this application is also being sent to Depco Inc. who is the only offset operator to this project.

Respectfully submitted,

GENERAL AMERICAN OIL COMPANY OF TEXAS

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

WEW/rc
Encls.

SFOCC

March 27, 1968

MAIN OFFICE OF

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

RECEIVED

APR 2 1968

O. C. C.
ANYEDIA, OFFICE

'68 APR 3 AM 8 33

'68 APR 1 AM 8 11

Dear Sir:

General American Oil Company of Texas hereby makes application for administrative approval to convert its Beckworth #2, Brewer #7, Brewer #10 and Brewer #16 wells to water injection in its East High Lonesome Penrose Sand Flood Unit. This flood was approved under Order No. R-2443 and expanded under Order No. WFX 235.

Attached in accordance with Rule 701 are the following:

- (1.) A plat showing the proposed injection wells and all wells within a two mile radius and the formations from which they produce or have produced.
- (2.) A portion of the available logs on the proposed injection wells.
- (3.) A diagrammatic sketch of the proposed injection wells showing casing, cement, tubing, packer, open hole, ect.
- (4.) A copy of the letter sent to the Office of the State Engineer.
- (5.) Form C-116 showing response to proposed wells from water injection.

By converting these wells it is felt that a better sweep efficiency can be obtained to the remaining producing wells. All four of these wells have become such high water cut wells that they are no longer economical to operate as producers. These conversions should give us a better sweep from the south side of this project.

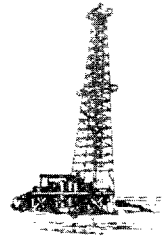
Note.

Well #7 is a part of
alternate Stage III

Xerox note to
SF H-2-68. No
objection to this
application.
P. J. H.

DEPCO, Inc.

Exploration & Production



800 Central
ODESSA, TEXAS 79760

April 1, 1968

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

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

1968 APR 4 AM 11:30

Dear Sir:

General American Oil Company has informed DEPCO, Inc. of their plans to convert the following East High Lonesome Waterflood Unit wells to water injection status: the Bosworth No. 2, Brewer No. 7, 10 and 16.

There will be no objection by DEPCO, Inc. to these conversions.

Yours truly,

A handwritten signature in cursive script, appearing to read "R. D. Yeates".

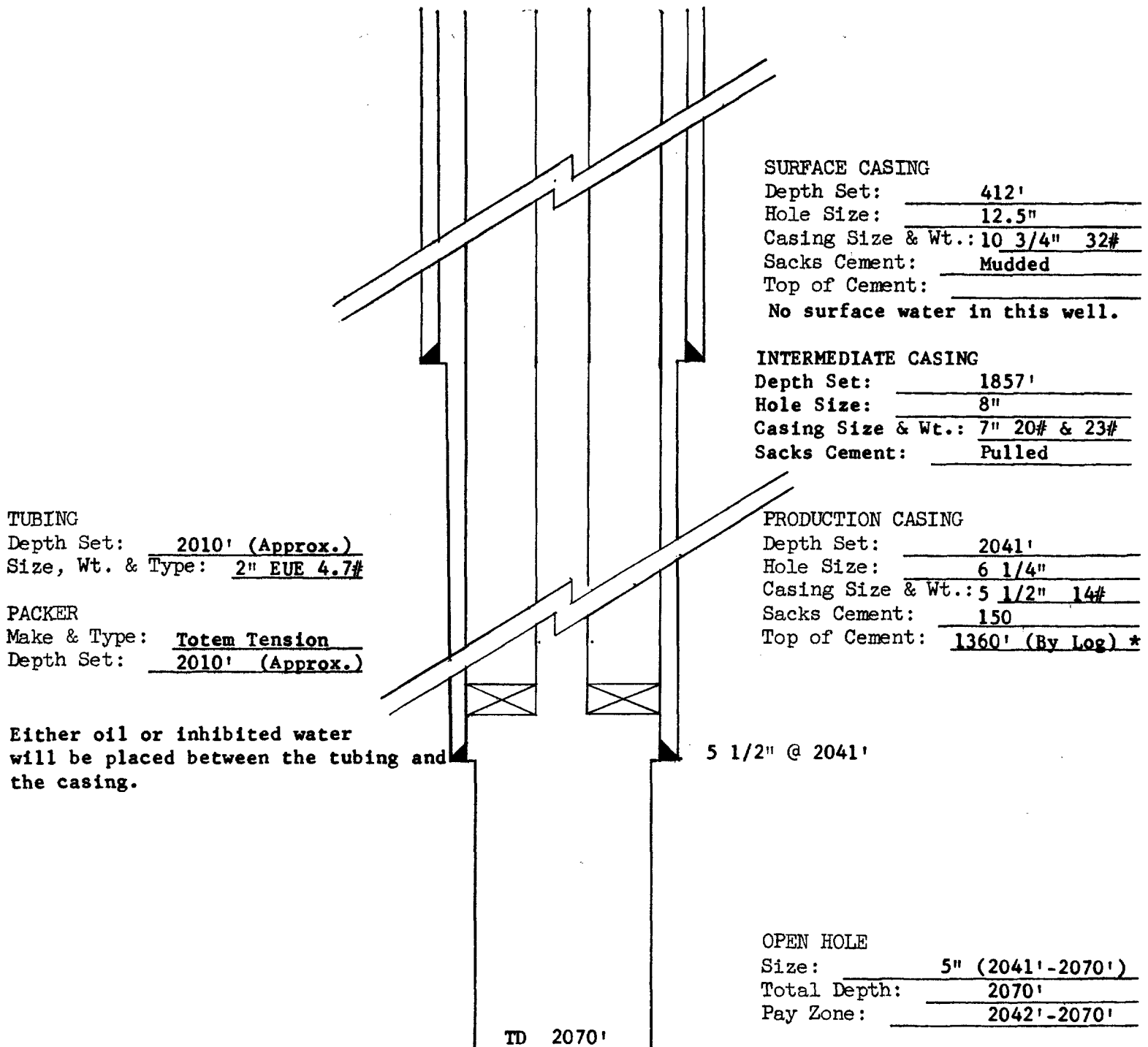
R. D. Yeates
District Engineer

RDYkm

cc: JMS, file

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

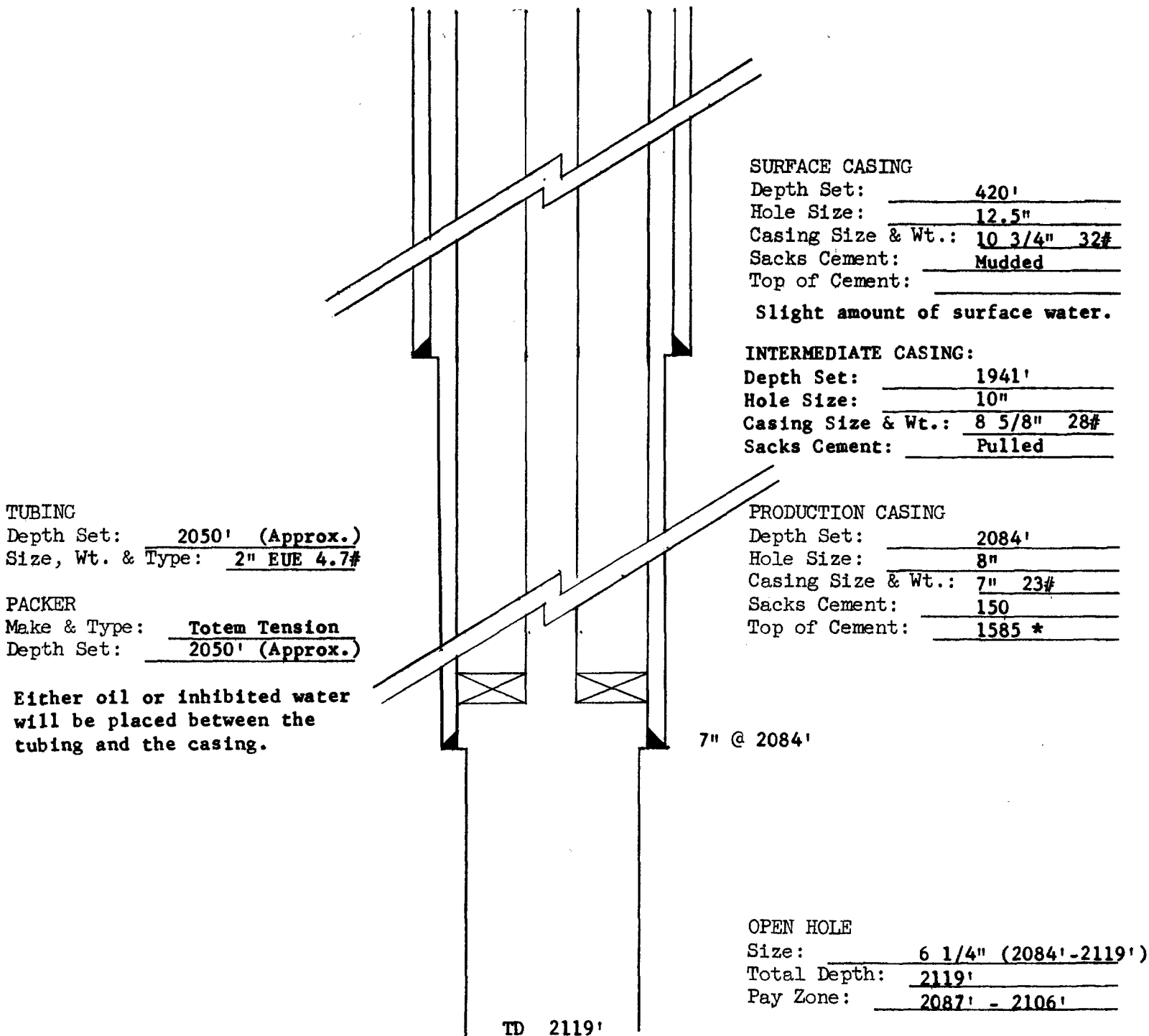
Lease and Well No.: Bosworth #2
Location: 1980 feet from South line and
1980 feet from East line of
Section 14 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico
Completion Date: 9-15-59



*Calculated Top of Cement: 184' of 5 1/2" casing in 6 1/4" hole at 75% fillup takes 12 sacks leaving 138 sacks to fill 559 feet between 5 1/2" casing and 8" hole at 75% fillup. Calculated top of cement

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

Lease and Well No.: Brewer #7
Location: 1980 feet from North line and
660 feet from West line of
Section 13 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico
Completion Date: 4-4-59

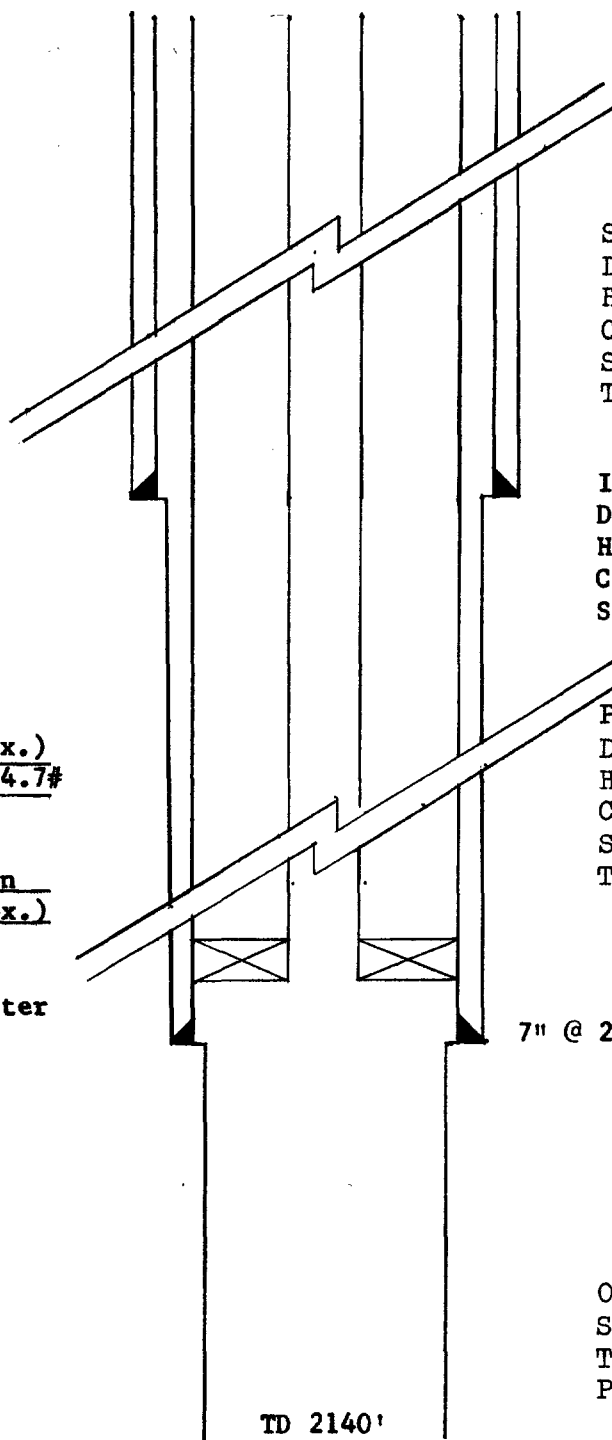


*Calculated Top of Cement: 143' of 7" casing in 8" hole at 75% fillup takes 16 sacks leaving 134 sacks to fill 356 feet of hole between 7" casing and 10" hole at 75% fill up. Calculated top of cement equals 1585'.

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

Lease and Well No.: Brewer #10
Location: 1980 feet from North line and
1977 feet from West line of
Section 13 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico

Completion Date: 6-21-59



SURFACE CASING

Depth Set: 380'
Hole Size: 12.5"
Casing Size & Wt.: 10 3/4" 32#
Sacks Cement: Mudded
Top of Cement: _____

INTERMEDIATE CASING:

Depth Set: 1972'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 28#
Sacks Cement: Pulled

PRODUCTION CASING

Depth Set: 2106'
Hole Size: 8"
Casing Size & Wt.: 7" 23#
Sacks Cement: 150
Top of Cement: 1610' *

TUBING

Depth Set: 2075' (Approx.)
Size, Wt. & Type: 2" EUE 4.7#

PACKER

Make & Type: Totem Tension
Depth Set: 2075' (Approx.)

Either oil or inhibited water
will be placed between the
tubing and the casing.

OPEN HOLE

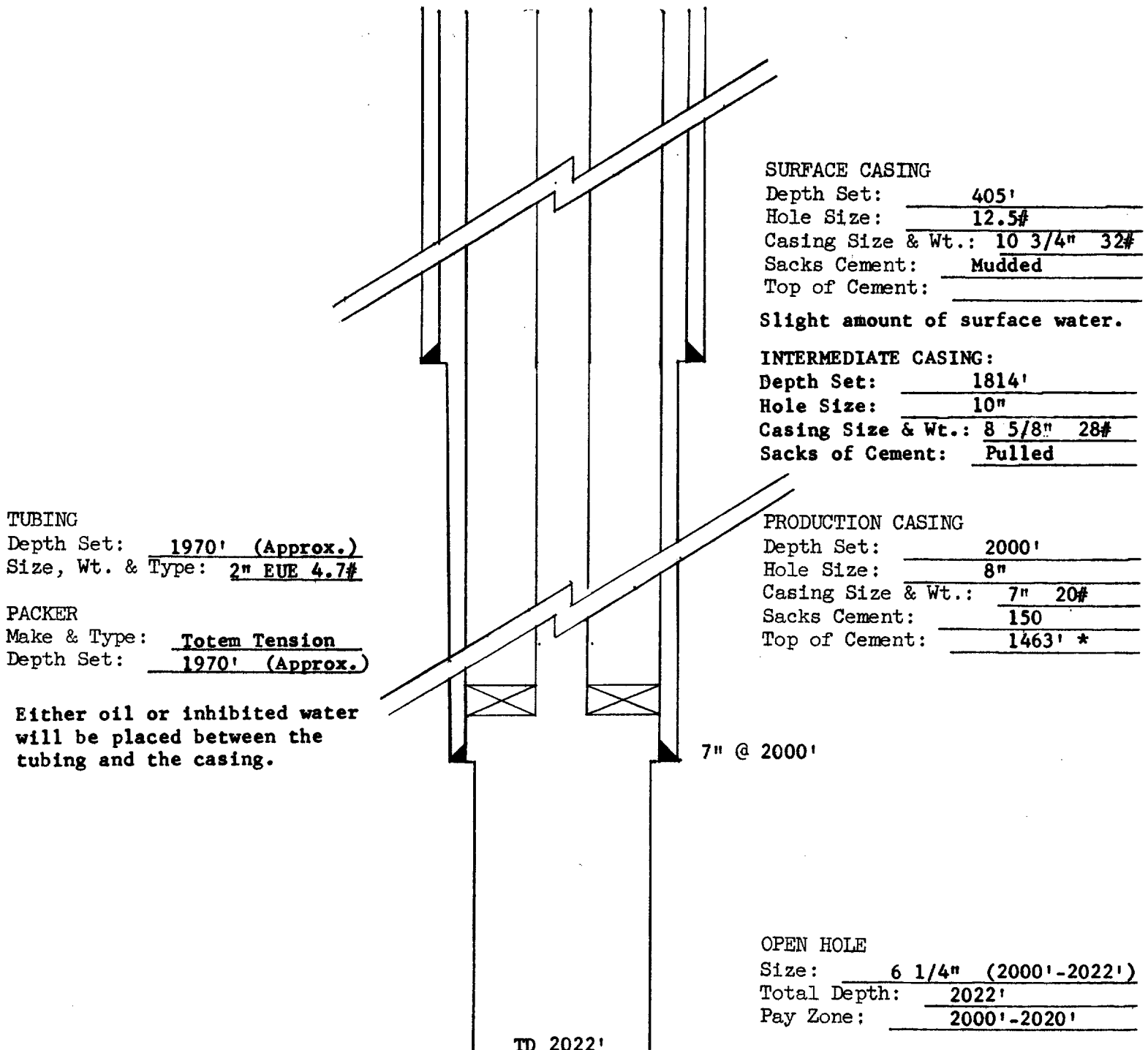
Size: 6 1/4" (2106'-2140')
Total Depth: 2140'
Pay Zone: 2107'-2137'

TD 2140'

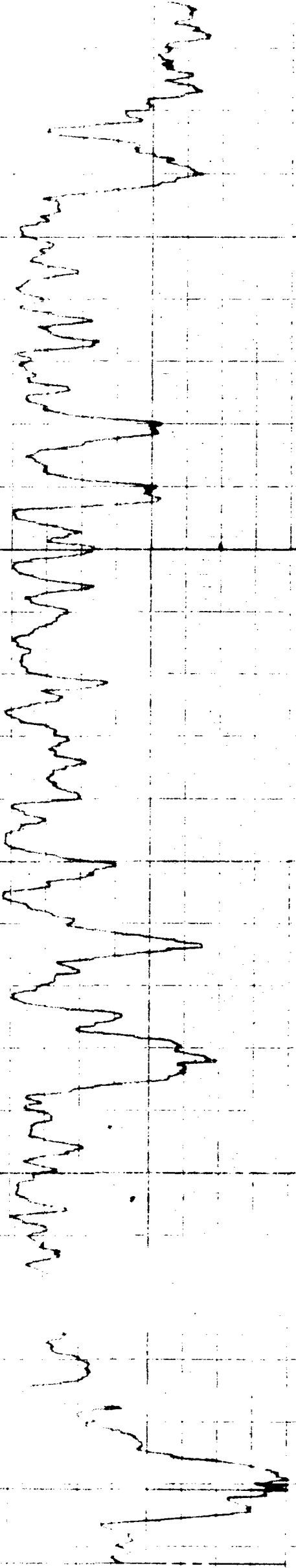
*Calculated Top of Cement: 134' of 7" casing in 8" hole at 75% fillup takes 16 sacks leaving 134 sacks to fill 362 feet of hole between 7" casing and 10" hole at 75% fillup. Top of cement calculates to be 1610'.

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

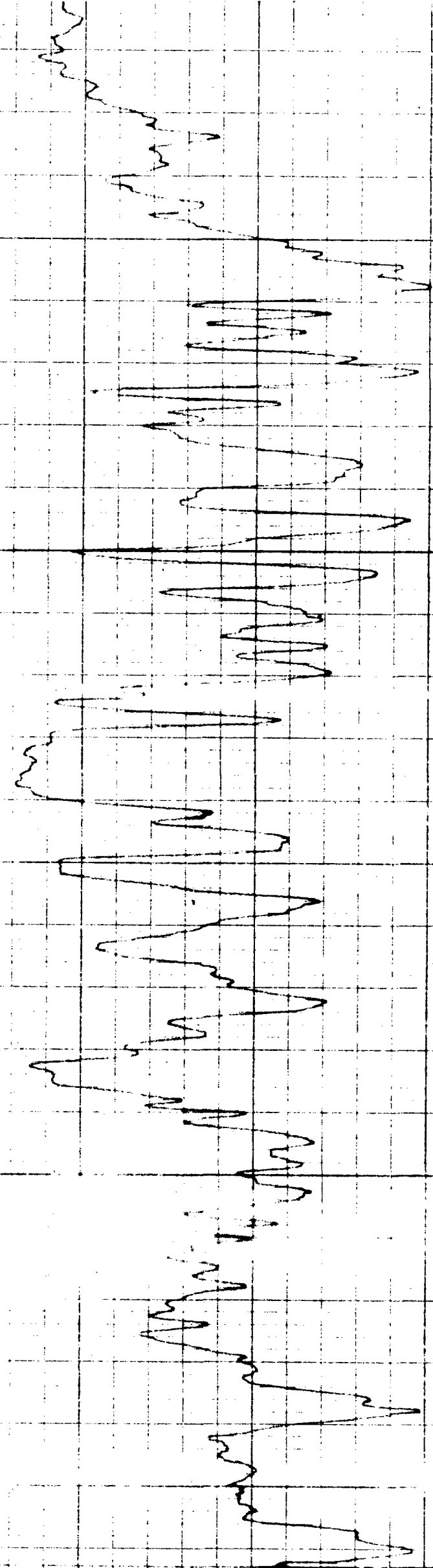
Lease and Well No.: Brewer #16
Location: 1980 feet from South line and
660 feet from West line of
Section 14 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico
Completion Date: 8-2-59



*Calculated Top of Cement: 186' of 7" casing in 8" hole at 75% fillup takes 20 sacks leaving 130 sacks to fillup 351 feet of hole between 7" casing and 10" hole at 75% fillup. Top of cement calculates to be 1463'.



R. D. 2063
T. D. 2064
GENERAL AMERICAN OIL COMPANY OF TEXAS
BOSWORTH NO. 2
HIGH LONESOME



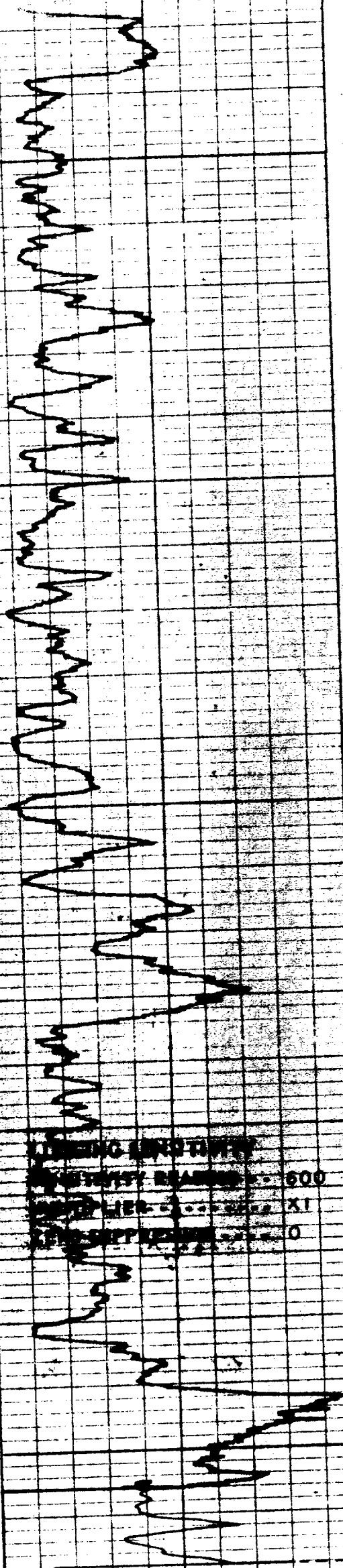
R. D. 2063
T. D. 2064

1 / 2"

1900

2000

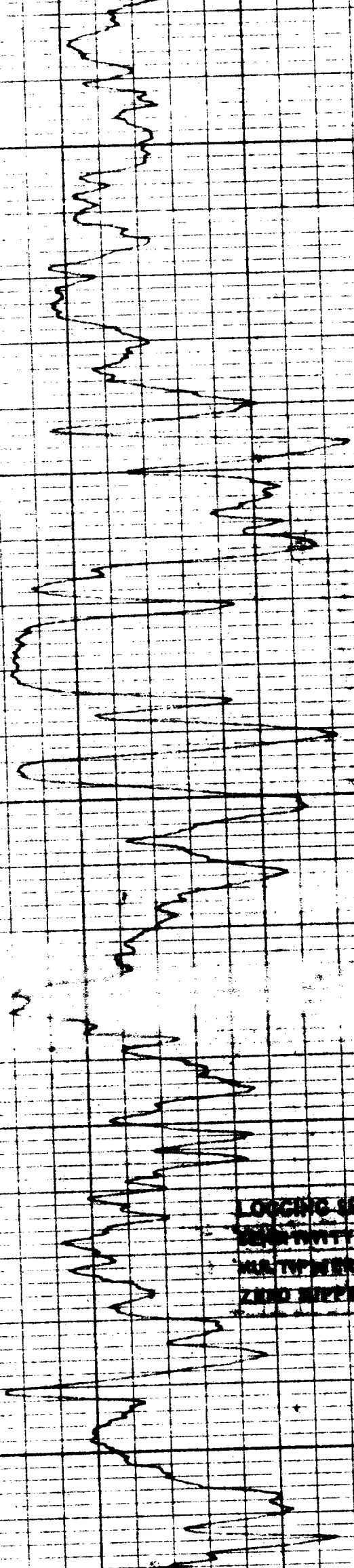
2100



LOGGING SENSITIVITY
SENSITIVITY READING... 600
MULTIPLIER... X1
ZERO SUPPRESSION... 0

R. D. 2118'
T. D. 2119'

GENERAL AMERICAN OIL CO. OF TEXAS
BREWER N°7
HIGH LONESOME



LOGGING SENSITIVITY
SENSITIVITY READING... 10
MULTIPLIER... X
ZERO SUPPRESSION... 2

R. D. 2118'
T. D. 2119'

1750 E U

1050 E U

900

FLUID LEVEL

15

2000

2100

R. D. 2137'

T. D. 2138'

GENERAL AMERICAN OIL COMPANY OF TEXAS
BREWSTER NO. 10
HIGH LONESOME

R. D. 2137'

T. D. 2138'

1800

1900

2000

LOGGING SENSITIVITY
SENSITIVITY READING... 0.18
MULTIPLIER... X1
ZERO SUPPRESSION... 0

R. C. 2020
T. V. 2021

GENERAL AMERICAN OIL COMPANY OF TEXAS

SREWER NO. 16

LOGGING SENSITIVITY

SENSITIVITY READING... 0.18
MULTIPLIER... X1
ZERO SUPPRESSION... 0

March 27, 1968

Mr. Frank Irby
Office of State Engineer
Santa Fe, New Mexico

3 APR 1 1968

Dear Sir:

Attached is a copy of the application which General American Oil Company of Texas has filed with the New Mexico Oil Conservation Commission requesting administrative approval to convert four additional wells to water injection in our East High Lonesome Waterflood Unit. This waterflood unit was approved by Commission Order No. R-2443 and expanded under Order No. WFX-235.

We have also enclosed copies of all exhibits furnished the Commission in support of our request and hope this data will be sufficient for your purpose.

If your office has no objections to these additional conversions please so notify the Commission.

Very truly yours,

GENERAL AMERICAN OIL COMPANY OF TEXAS

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

WEW/rc
Encls.

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

Circle
Revised 1-1-65

Operator General American Oil Company of Texas		Pool High Lonesome		County Eddy									
Address P. O. Box 416, Loco Hills, New Mexico		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Scheduled <input type="checkbox"/> Special <input checked="" type="checkbox"/>									
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU. FT./BBL.
		U	S	T						R	WATER BBL.S.	GRAV. OIL	
Bosworth	2	J	14	16	29				24	8		13	
										54		66	
										36		108	
										130		27	
										108		6	
										156		6	
										102		3	
Put on Flowing Status Only Flowed Periodically.													

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

W. E. Walter
(Signature) **W. E. Walter**

District Superintendent

(Title)

March 27, 1968

(Date)

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County		TYPE OF TEST - (X)		Completion		Special				
General American Oil Company of Texas		High Lonesome		Eddy										
Address		P. O. Box 416, Loco Hills, New Mexico												
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.	
		U	S	T						R	WATER BBL.	GRAV. OIL		OIL BBL.
Brewer	7	E	13	16	29	5-64				24	0		22	
						9-64				24	0		20	
						12-64				24	0		24	
						3-65				24	3		26	
						6-65				24	3		63	
						9-65				24	0		108	
						12-65				24	87		67	
						4-66				24	104		24	
						6-66				24	216		24	
						9-66				24	240		18	
						12-66				24	360		12	
						2-67				24	450		0	
Shut-In														

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

W. E. Walte
(Signature) **W. E. Walte**

District Superintendent

(Title)

March 27, 1968

(Date)

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County												
General American Oil Company of Texas		High Lonesome		Eddy												
Address		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Scheduled <input type="checkbox"/>		Special <input checked="" type="checkbox"/>										
LEASE NAME		WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST		GAS - OIL RATIO			
			U	S	T	R					WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	GAS - OIL RATIO CU.FT./BBL	
Brewer	10	F	13	16	29	1-64				24	27		23			
						6-64				24	45		27			
						12-64				24	54		20			
						6-65				24	72		6			
						12-65				24	60		78			
						6-66				24	134		73			
						12-66				24	80		38			
						3-67				24	115		4			
						5-67				24	113		5			
											Shut-In					

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

W. E. Walter
(Signature)
W. E. Walter
District Superintendent
March 27, 1968
(Date)

File
Revised 1-1-65

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

W. E. Walter W. E. Walter
(Signature)

District Superintendent

March 27, 1968
(Date)

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 30j and appropriate pool rules.

NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS

C-116
Revised 1-1-65

Operator		Pool		County										
General American Oil Company of Texas		High Lonesome		Eddy										
Address		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Scheduled <input type="checkbox"/>		Special <input checked="" type="checkbox"/>								
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL	
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.
Brewer	16	L	14	16	29	10-63				24	0		10	
						12-63				24	18		13	
						6-64				24	5		20	
						12-64				24	3		8	
						6-65				24	3		47	
						12-65				24	5		148	
						6-66				24	72		15	
						12-66				24	54		9	
						3-67				24	265		9	
						Shut-In								
X FRACED														

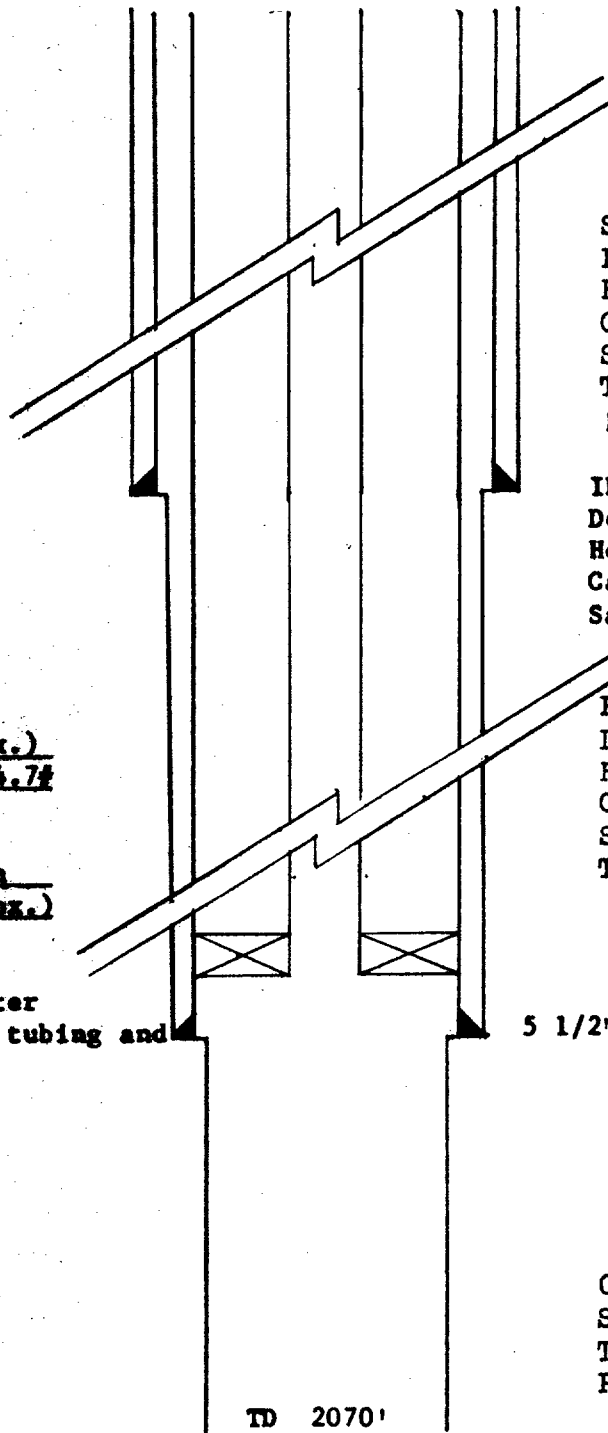
No well will be assigned an allowable greater than the amount of oil produced on the official test.
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.
Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.
Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

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

W. E. Walte W. E. Walte
(Signature)
District Superintendent
March 27, 1968
(Date)

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

Lease and Well No.: Bosworth #2
Location: 1980 feet from South line and
1980 feet from East line of
Section 14 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico
Completion Date: 9-15-59



SURFACE CASING

Depth Set: 412'
Hole Size: 12.5"
Casing Size & Wt.: 10 3/4" 32#
Sacks Cement: Mudded
Top of Cement: _____
No surface water in this well.

INTERMEDIATE CASING

Depth Set: 1857'
Hole Size: 8"
Casing Size & Wt.: 7" 20# & 23#
Sacks Cement: Pulled

PRODUCTION CASING

Depth Set: 2041'
Hole Size: 6 1/4"
Casing Size & Wt.: 5 1/2" 14#
Sacks Cement: 150
Top of Cement: 1360' (By Log) *

TUBING

Depth Set: 2010' (Approx.)
Size, Wt. & Type: 2" EUE 4.7#

PACKER

Make & Type: Toten Tension
Depth Set: 2010' (Approx.)

Either oil or inhibited water
will be placed between the tubing and
the casing.

5 1/2" @ 2041'

OPEN HOLE

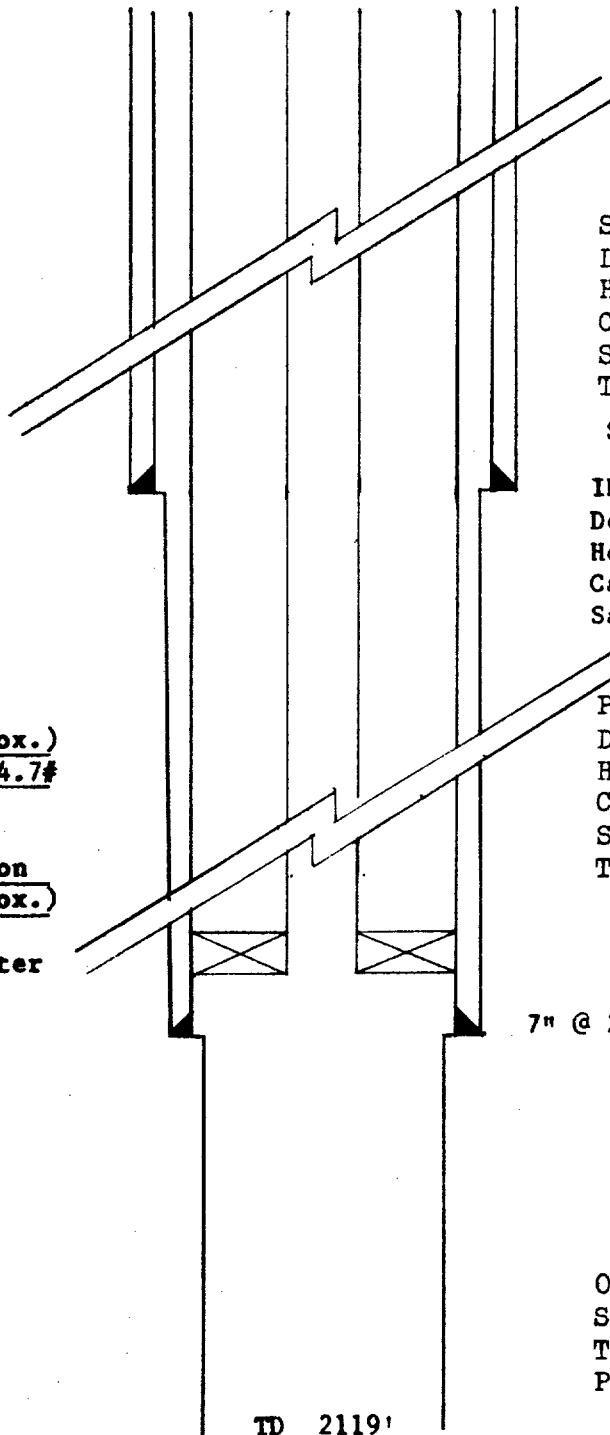
Size: 5" (2041'-2070')
Total Depth: 2070'
Pay Zone: 2042'-2070'

TD 2070'

*Calculated Top of Cement: 184' of 5 1/2" casing in 6 1/4" hole at 75% fillup takes 12 sacks leaving 138 sacks to fill 559 feet between 5 1/2" casing and 8" hole at 75% fillup. Calculated top of cement 1344'.

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

Lease and Well No.: Brewer #7.
Location: 1980 feet from North line and
660 feet from West line of
Section 13 TWP 16-S RGE 29-E
N.M.P.M. Eddy County, New Mexico
Completion Date: 4-4-59



SURFACE CASING

Depth Set: 420'
Hole Size: 12.5"
Casing Size & Wt.: 10 3/4" 32#
Sacks Cement: Mudded
Top of Cement: _____

Slight amount of surface water.

INTERMEDIATE CASING:

Depth Set: 1941'
Hole Size: 10"
Casing Size & Wt.: 8 5/8" 28#
Sacks Cement: Pulled

PRODUCTION CASING

Depth Set: 2084'
Hole Size: 8"
Casing Size & Wt.: 7" 23#
Sacks Cement: 150
Top of Cement: 1585 *

TUBING

Depth Set: 2050' (Approx.)
Size, Wt. & Type: 2" EUE 4.7#

PACKER

Make & Type: Toten Tension
Depth Set: 2050' (Approx.)

Either oil or inhibited water
will be placed between the
tubing and the casing.

7" @ 2084'

OPEN HOLE

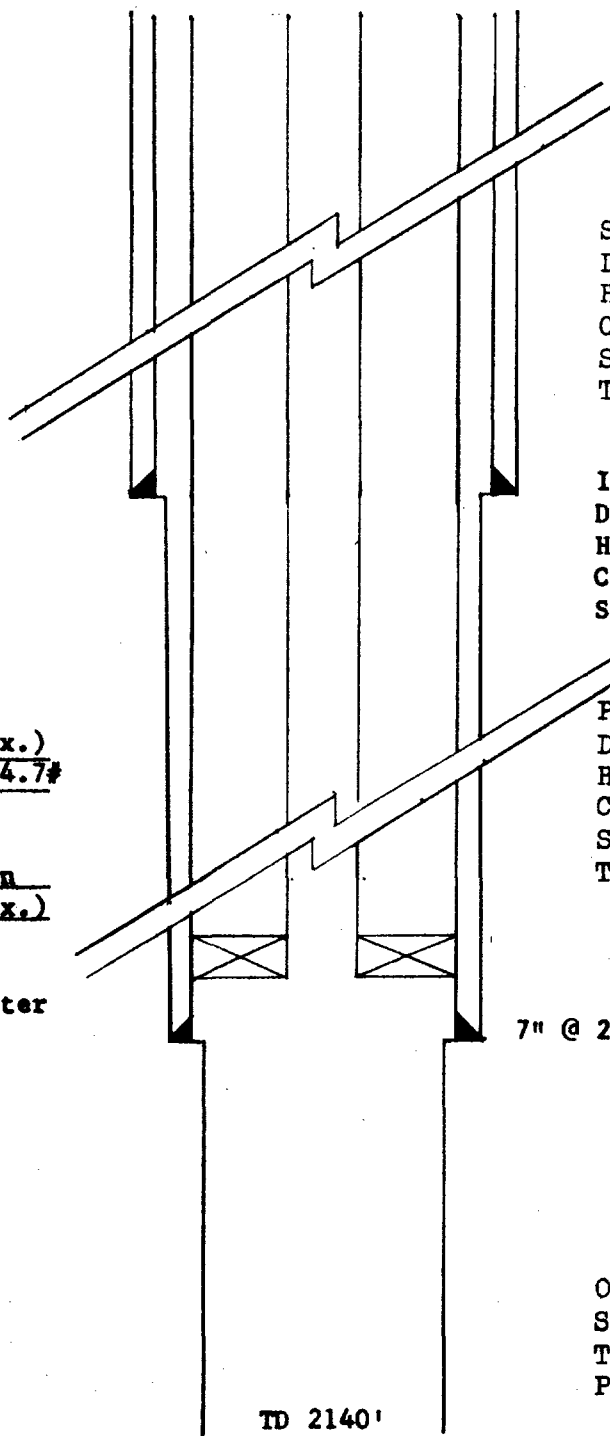
Size: 6 1/4" (2084'-2119')
Total Depth: 2119'
Pay Zone: 2087' - 2106'

TD 2119'

Calculated Top of Cement: 143' of 7" casing in 8" hole at 75% fillup takes 16 sacks leaving 134 sacks to fill 356 feet of hole between 7" casing and 10" hole at 75% fill up. Calculated top of cement equals 1585'.

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

Lease and Well No.: Brewer #10
 Location: 1980 feet from North line and
1977 feet from West line of
 Section 13 TWP 16-S RGE 29-E
 N.M.P.M. Eddy County, New Mexico
 Completion Date: 6-21-59



SURFACE CASING
 Depth Set: 380'
 Hole Size: 12.5"
 Casing Size & Wt.: 10 3/4" 32#
 Sacks Cement: Mudded
 Top of Cement: _____

INTERMEDIATE CASING:
 Depth Set: 1972'
 Hole Size: 10"
 Casing Size & Wt.: 8 5/8" 28#
 Sacks Cement: Pulled

PRODUCTION CASING
 Depth Set: 2106'
 Hole Size: 8"
 Casing Size & Wt.: 7" 23#
 Sacks Cement: 150
 Top of Cement: 1610' *

TUBING
 Depth Set: 2075' (Approx.)
 Size, Wt. & Type: 2" EUE 4.7#

PACKER
 Make & Type: Toten Tension
 Depth Set: 2075' (Approx.)

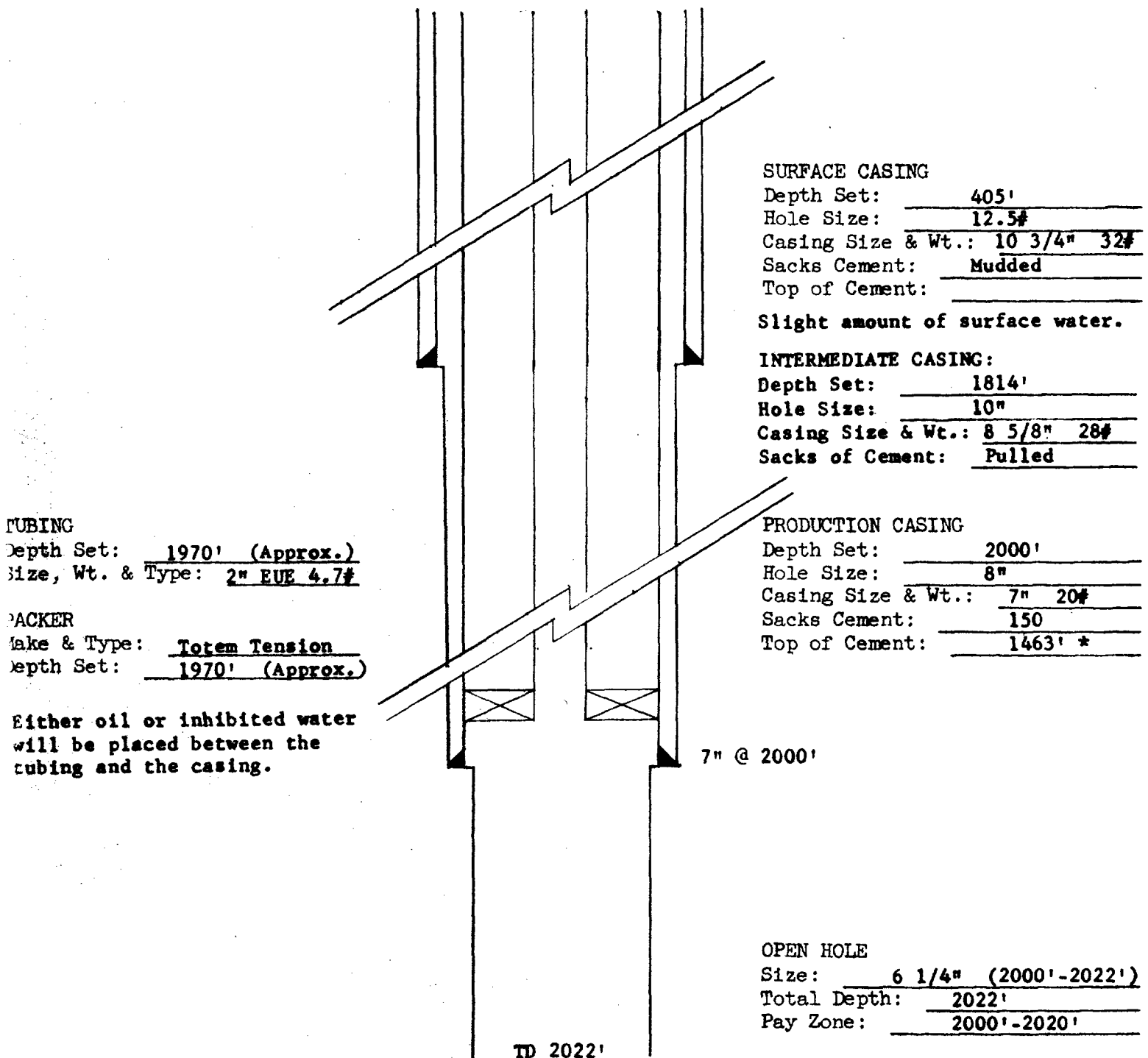
Either oil or inhibited water
will be placed between the
tubing and the casing.

OPEN HOLE
 Size: 6 1/4" (2106'-2140')
 Total Depth: 2140'
 Pay Zone: 2107'-2137'

*Calculated Top of Cement: 134' of 7" casing in 8" hole at 75% fillup takes 16 sacks leaving 134 sacks to fill 362 feet of hole between 7" casing and 10" hole at 75% fillup. Top of cement calculates to be 1610'.

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

Lease and Well No.: Brewer #16
 Location: 1980 feet from South line and
660 feet from West line of
 Section 14 TWP 16-S RGE 29-E
 N.M.P.M. Eddy County, New Mexico
 Completion Date: 8-2-59



Calculated Top of Cement: 186' of 7" casing in 8" hole at 75% fillup takes 20 sacks leaving 130 sacks to fillup 351 feet of hole between 7" casing and 10" hole at 75% fillup. Top of cement calculates to be 1463'.

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE