

RECEIVED
12



LEGEND	
⊙	Unit Producer
⊛	Injector
●	Non-Unit Producer

Hanagan Petroleum Corporation		
TWIN LAKES SAN ANDRES UNIT #		
Application for Injection (C-108)		
Area of Review		
Chaves Co., NM		C-108 Item V
1"=5000'		Hanagan

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request

NMOCD Case No. 12023

WELL NAME: Harlow Corporation / Willow Pipeline Co. Kucheman #1
FOOTAGE: 990' FNL & 954' FWL
SECTION: 30-T8s-R29E , Unit D
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	5.5"
CASING WEIGHT:	20#/ft	14#/ft
CASING DEPTH:	128'	2789'
CEMENT:	70sx	125sx
TOP OF CEMENT:	Surface	1837' calculated

PROPOSED TUBULAR & PACKER INFORMATION

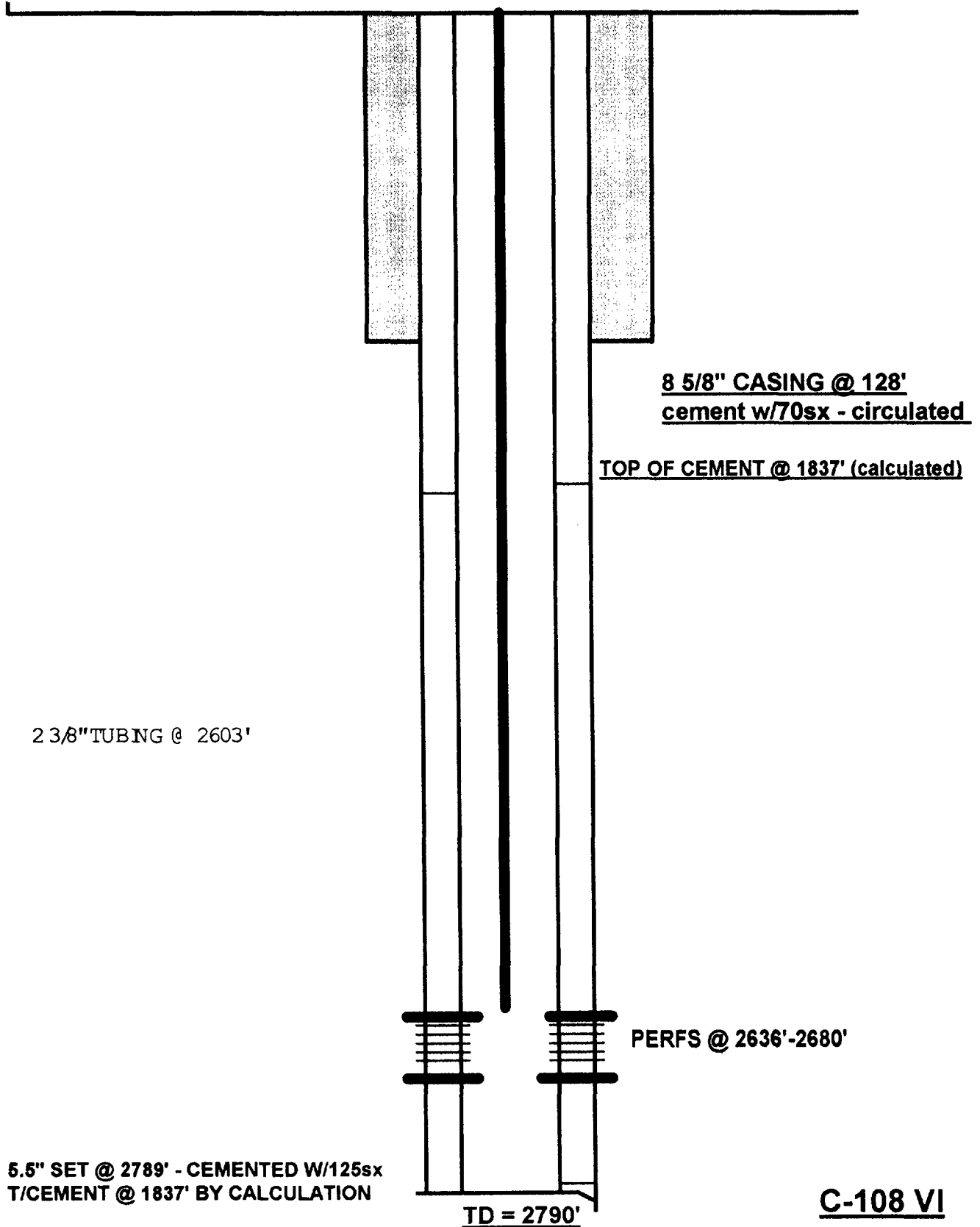
TUBING:
PACKER DEPTH:
PACKER TYPE:

PROPOSED INJECTION FORMATION:	
PROPOSED INJECTION INTERVAL:	
EXISTING PERFORATIONS:	2636' - 2680'
CEMENT ABOVE TOP PERFORATION:	800'
ORIGINAL WELL PURPOSE:	Oil Well
OTHER PERFORATED INTERVALS:	None
NEXT PAY ZONE - ABOVE:	None
TOTAL DEPTH:	2790'

Willow Pipeline submitted Change of Operator in 8/97: transfer has not been approved by NMOCD

Last change in wellbore condition as per NMOCD-Artesia Records was June 22,1979

HARLOW/WILLOW PIPELINE
KUCHEMAN #1
Well Schematic
NMOCD Case #12023



C-108 VI

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request

NMOCD Case No. 12023

WELL NAME: Harlow Corporation / Willow Pipeline Co. Kucheman #4
FOOTAGE: 1650' FNL & 1614' FWL
SECTION: 30-T8S-R29E , Unit F
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	5.5"
CASING WEIGHT:	20#/ft	14#/ft
CASING DEPTH:	125'	2800'
CEMENT:	4yds	125sx
TOP OF CEMENT:	Surface ?	1848' calculated

PROPOSED TUBULAR & PACKER INFORMATION

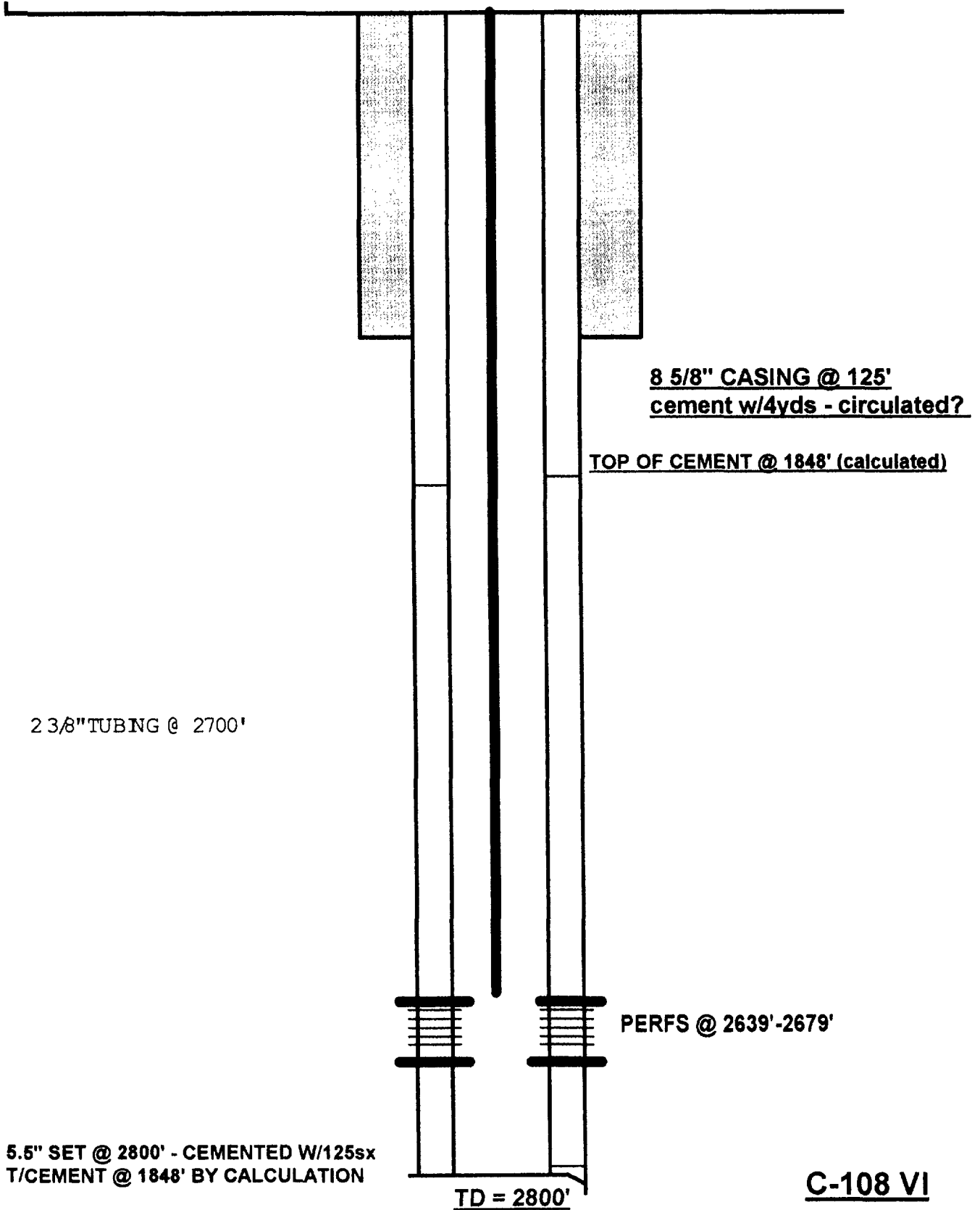
TUBING:
PACKER DEPTH:
PACKER TYPE:

PROPOSED INJECTION FORMATION:	
PROPOSED INJECTION INTERVAL:	
EXISTING PERFORATIONS:	2639'-2679'
CEMENT ABOVE TOP PERFORATION:	791'
ORIGINAL WELL PURPOSE:	Oil Well
OTHER PERFORATED INTERVALS:	None
NEXT PAY ZONE - ABOVE:	None
TOTAL DEPTH:	2800'

Willow Pipeline submitted Change of Operator in 8/97: transfer has not been approved by NMOCD

Last change in wellbore condition as per NMOCD-Artesia Records was 1/29/81

HARLOW/WILLOW PIPELINE
KUCHEMAN #4
Well Schematic
NMOCD Case #12023



C-108 VI

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request
NMOCD Case No. 12023

WELL NAME: Harlow Corporation / Willow Pipeline Co. Kucheman #5
FOOTAGE: 2310' FNL & 2310' FEL
SECTION: 30-T8S-R29E , Unit G
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	5.5"
CASING WEIGHT:	20#/ft	14#/ft
CASING DEPTH:	126'	2830'
CEMENT:	4yds	125sx
TOP OF CEMENT:	Surface ?	1878' calculated

PROPOSED TUBULAR & PACKER INFORMATION

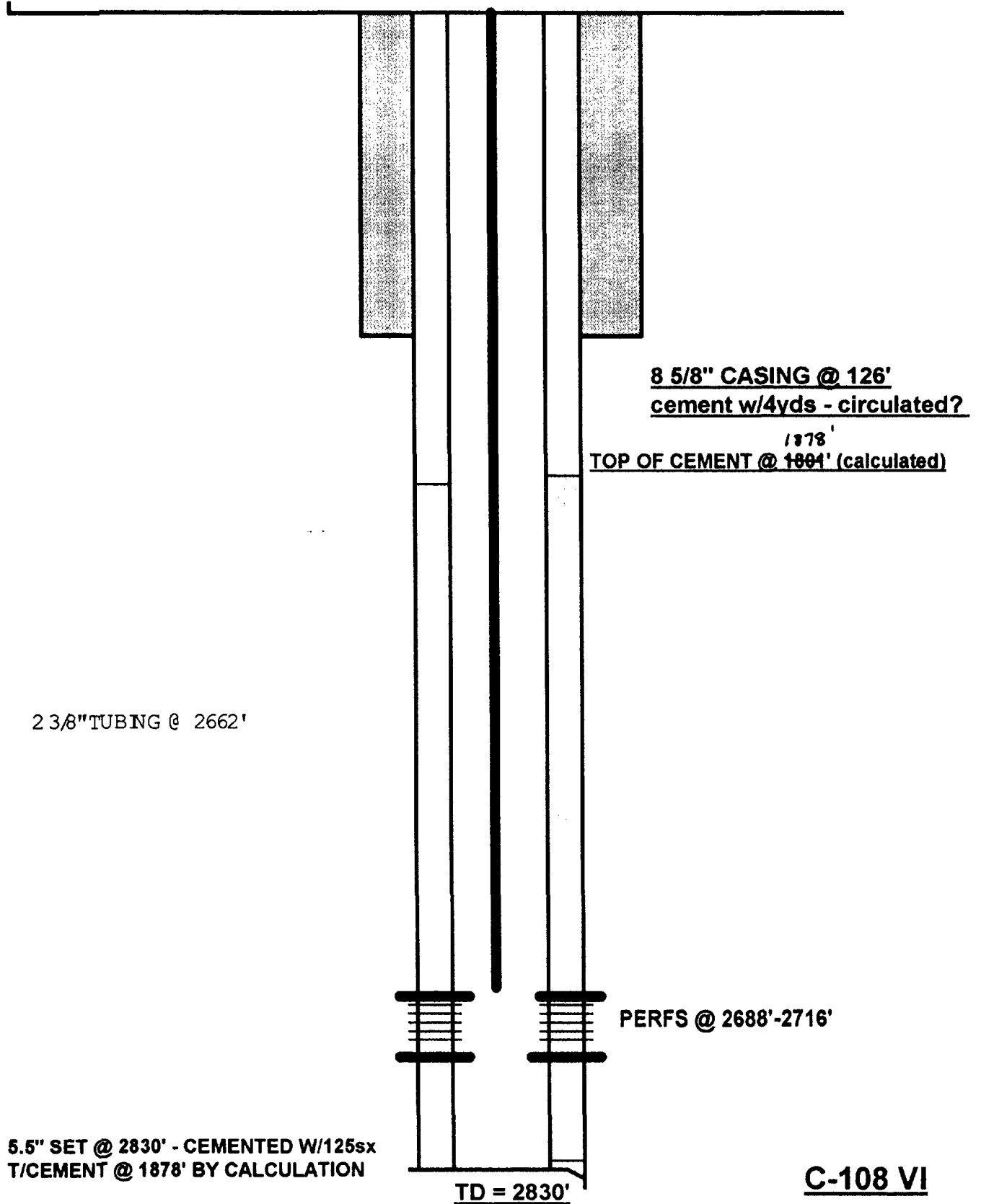
TUBING:
PACKER DEPTH:
PACKER TYPE:

PROPOSED INJECTION FORMATION:	
PROPOSED INJECTION INTERVAL:	
EXISTING PERFORATIONS:	2688'-2716'
CEMENT ABOVE TOP PERFORATION:	810'
ORIGINAL WELL PURPOSE:	Oil Well
OTHER PERFORATED INTERVALS:	None
NEXT PAY ZONE - ABOVE:	None
TOTAL DEPTH:	2830'

Willow Pipeline submitted Change of Operator in 8/97: transfer has not been approved by NMOCD

Last change in wellbore condition as per NMOCD-Artesia Records was 5/28/81

HARLOW/WILLOW PIPELINE
KUCHEMAN #5
Well Schematic
NMOCD Case #12023



C-108 VI

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request

NMOCD Case No. 12023

WELL NAME: Harlow Corporation / Willow Pipeline Co. OBRIEN #5
FOOTAGE: 2310' FNL & 330' FEL
SECTION: 25-T8S-R28E , Unit H
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	5.5"
CASING WEIGHT:	20#/ft	14#/ft
CASING DEPTH:	148'	2753'
CEMENT:	60sx	125sx
TOP OF CEMENT:	Surface	1801' calculated

PROPOSED TUBULAR & PACKER INFORMATION

TUBING:

PACKER DEPTH:

PACKER TYPE:

PROPOSED INJECTION FORMATION:

PROPOSED INJECTION INTERVAL:

EXISTING PERFORATIONS: 2632'-2648'

CEMENT ABOVE TOP PERFORATION: 830'

ORIGINAL WELL PURPOSE: Oil Well

OTHER PERFORATED INTERVALS: None

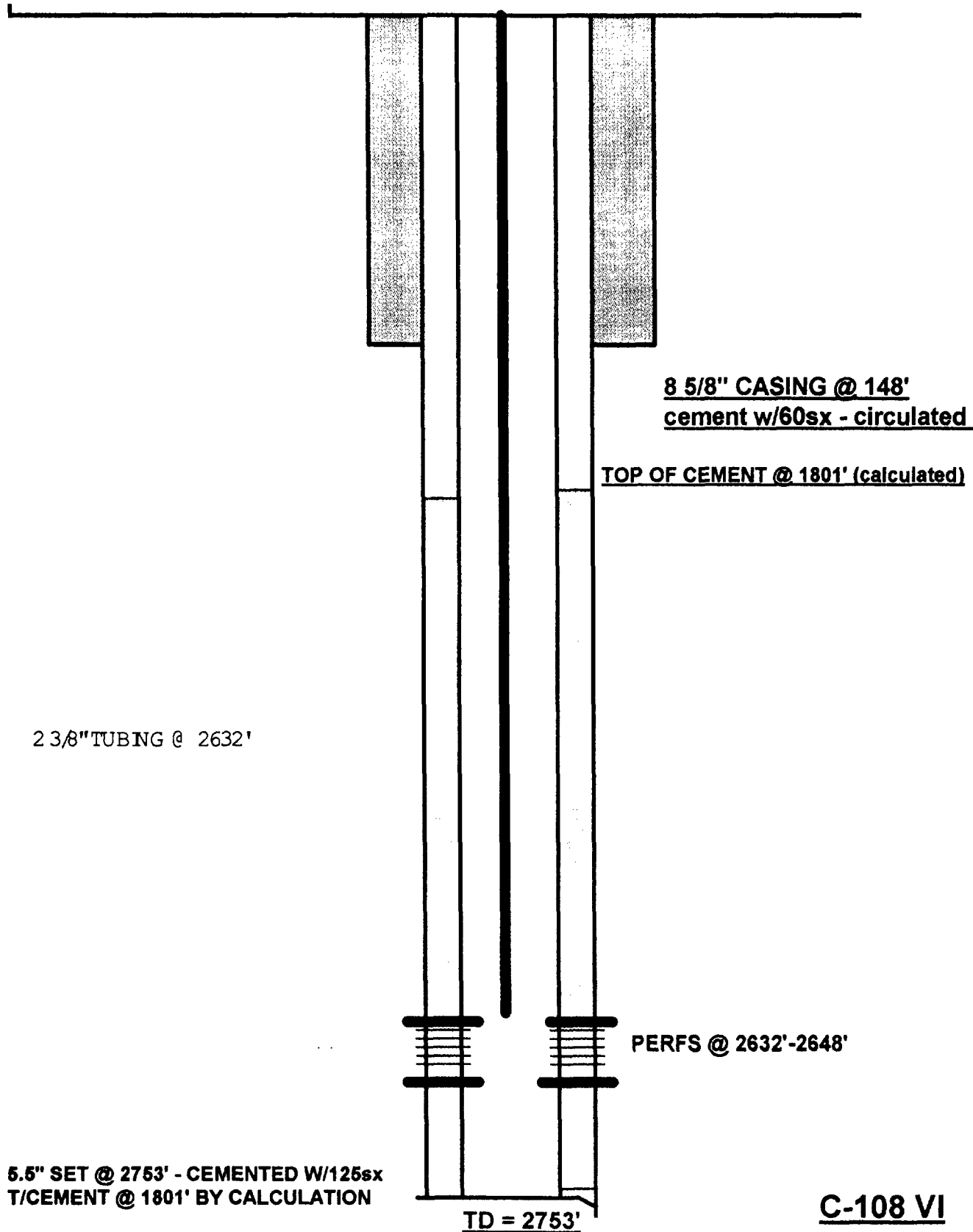
NEXT PAY ZONE - ABOVE: None

TOTAL DEPTH: 2753'

Willow Pipeline submitted Change of Operator in 8/97: transfer has not been approved by NMOCD

Last change in wellbore condition as per NMOCD-Artesia Records was 1/2/81

HARLOW/WILLOW PIPELINE
OBRIEN 25 #5
Well Schematic
NMOCD Case #12023



C-108 VI

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request

NMOCD Case No. 12023

WELL NAME: Sandco Oil & Gas, Inc. Sandco #2
FOOTAGE: 3210' FNL & 1650' FEL
SECTION: 25-T8S-R28E , Unit G
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	4.5"
CASING WEIGHT:	23#/ft	11.6#/ft
CASING DEPTH:	125'	2700'
CEMENT:	6yds	200sx
TOP OF CEMENT:	Surface	1159' calculated

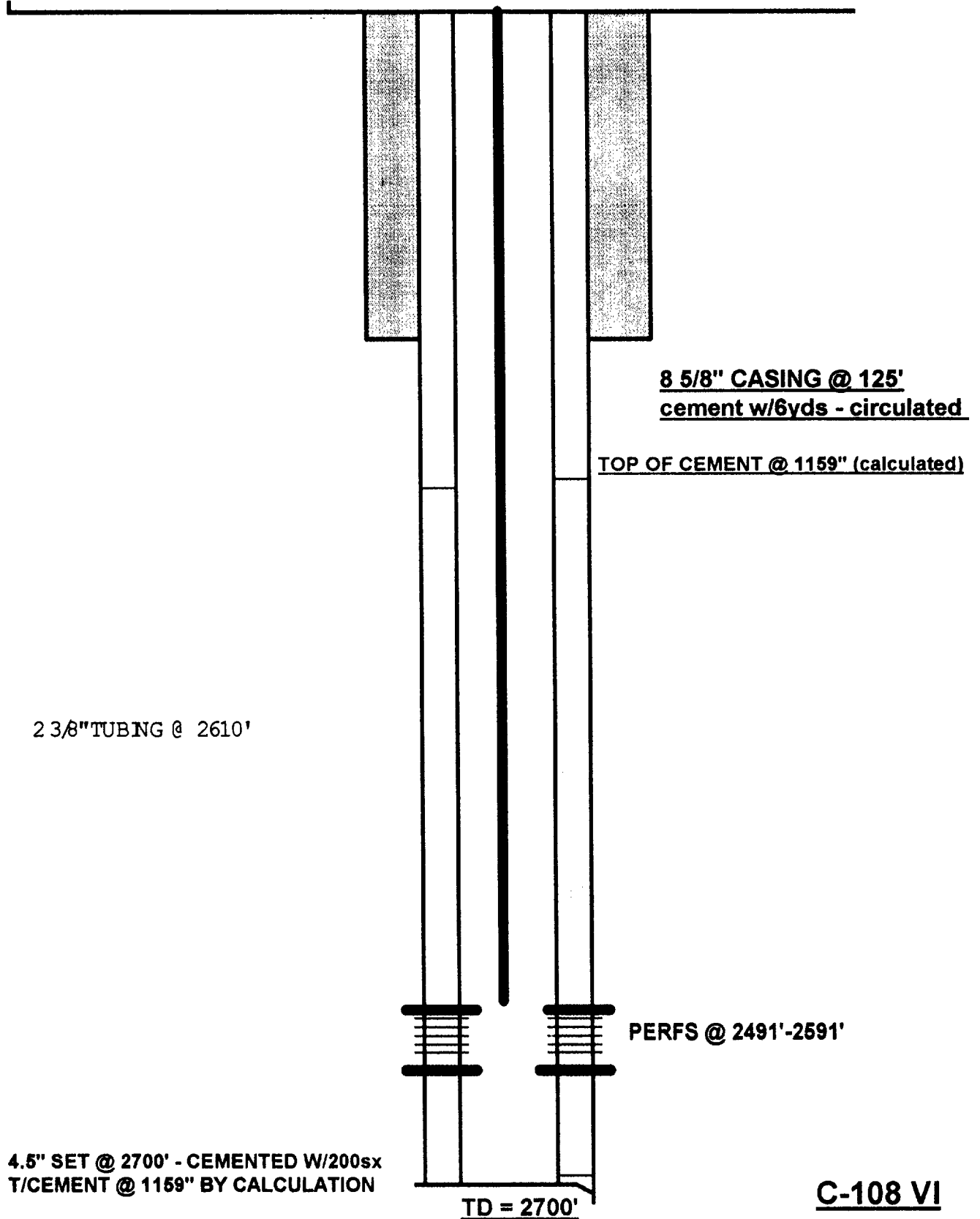
PROPOSED TUBULAR & PACKER INFORMATION

TUBING:
PACKER DEPTH:
PACKER TYPE:

PROPOSED INJECTION FORMATION:	
PROPOSED INJECTION INTERVAL:	
EXISTING PERFORATIONS:	2491'-2591'
CEMENT ABOVE TOP PERFORATION:	1332'
ORIGINAL WELL PURPOSE:	Oil Well
OTHER PERFORATED INTERVALS:	None
NEXT PAY ZONE - ABOVE:	None
TOTAL DEPTH:	2700'

Last change in wellbore condition as per NMOCD-Artesia Records was 6/11/84

Sandco Oil & Gas, Inc
Sandco #2
Well Schematic
NMOCD Case #12023



C-108 VI

**HANAGAN PETROLEUM CORPORATION
TWIN LAKES SAN ANDRES WATERFLOOD UNIT**

Supplemental information

As Per Mr. Michael Stogner Request

NMOCD Case No. 12023

WELL NAME: Sandco Oil & Gas, Inc. Sandco #3
FOOTAGE: 990' FNL & 330' FEL
SECTION: 25-T8S-R28E , Unit A
COUNTY: Chaves

EXISTING CASING PROGRAM

HOLE SIZE:	11"	7.875"
CASING SIZE:	8.625"	4.5"
CASING WEIGHT:	23#/ft	11.6#/ft
CASING DEPTH:	124'	2753'
CEMENT:	6yds	175sx
TOP OF CEMENT:	Surface	1734' calculated

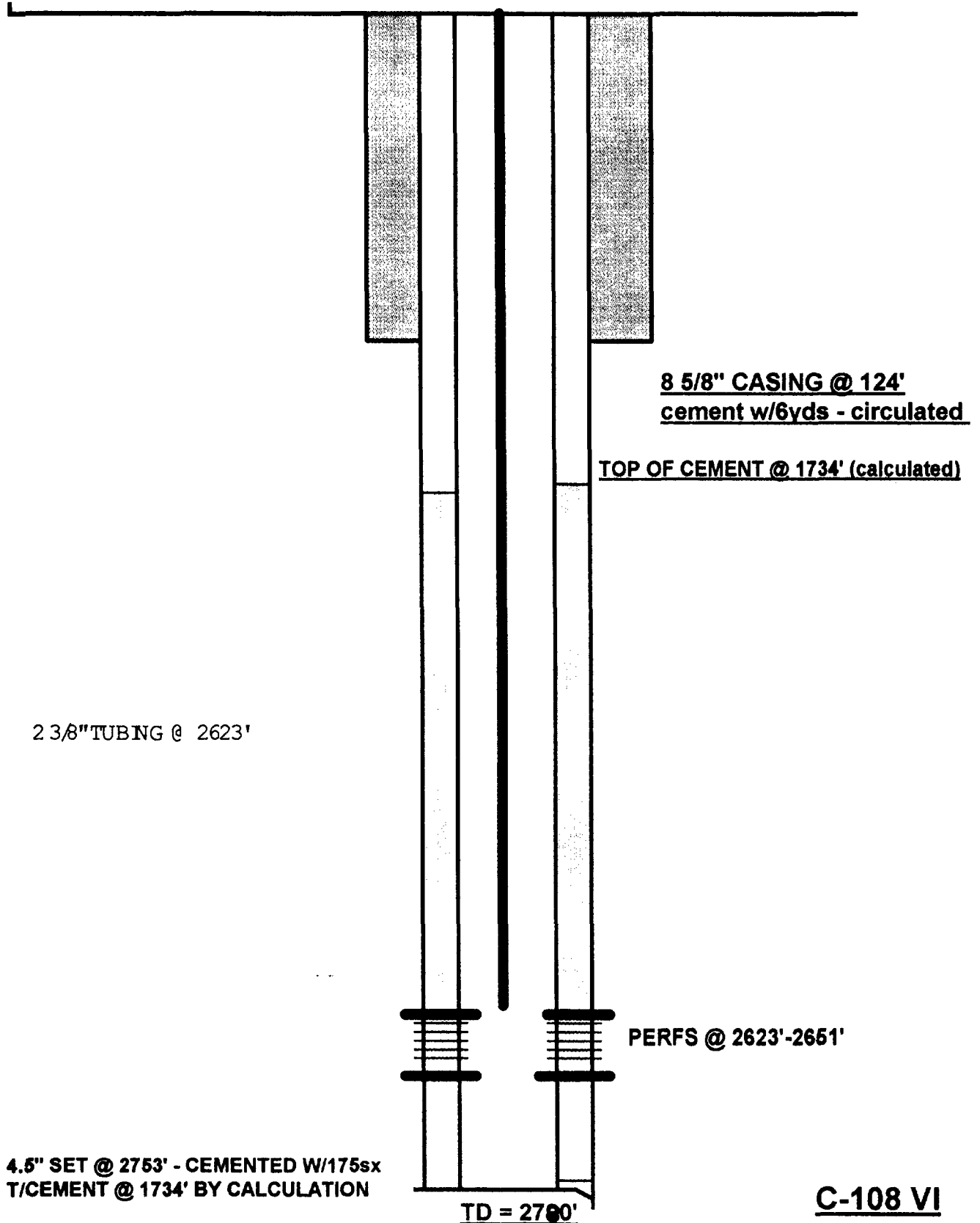
PROPOSED TUBULAR & PACKER INFORMATION

TUBING:
PACKER DEPTH:
PACKER TYPE:

PROPOSED INJECTION FORMATION:	
PROPOSED INJECTION INTERVAL:	
EXISTING PERFORATIONS:	2623'-2651'
CEMENT ABOVE TOP PERFORATION:	889'
ORIGINAL WELL PURPOSE:	Oil Well
OTHER PERFORATED INTERVALS:	None
NEXT PAY ZONE - ABOVE:	None
TOTAL DEPTH:	2780'

Last change in wellbore condition as per NMOCD-Artesia Records was 6/11/84

Sandco Oil & Gas, Inc
Sandco #3
Well Schematic
NMOCD Case #12023



C-108 VI