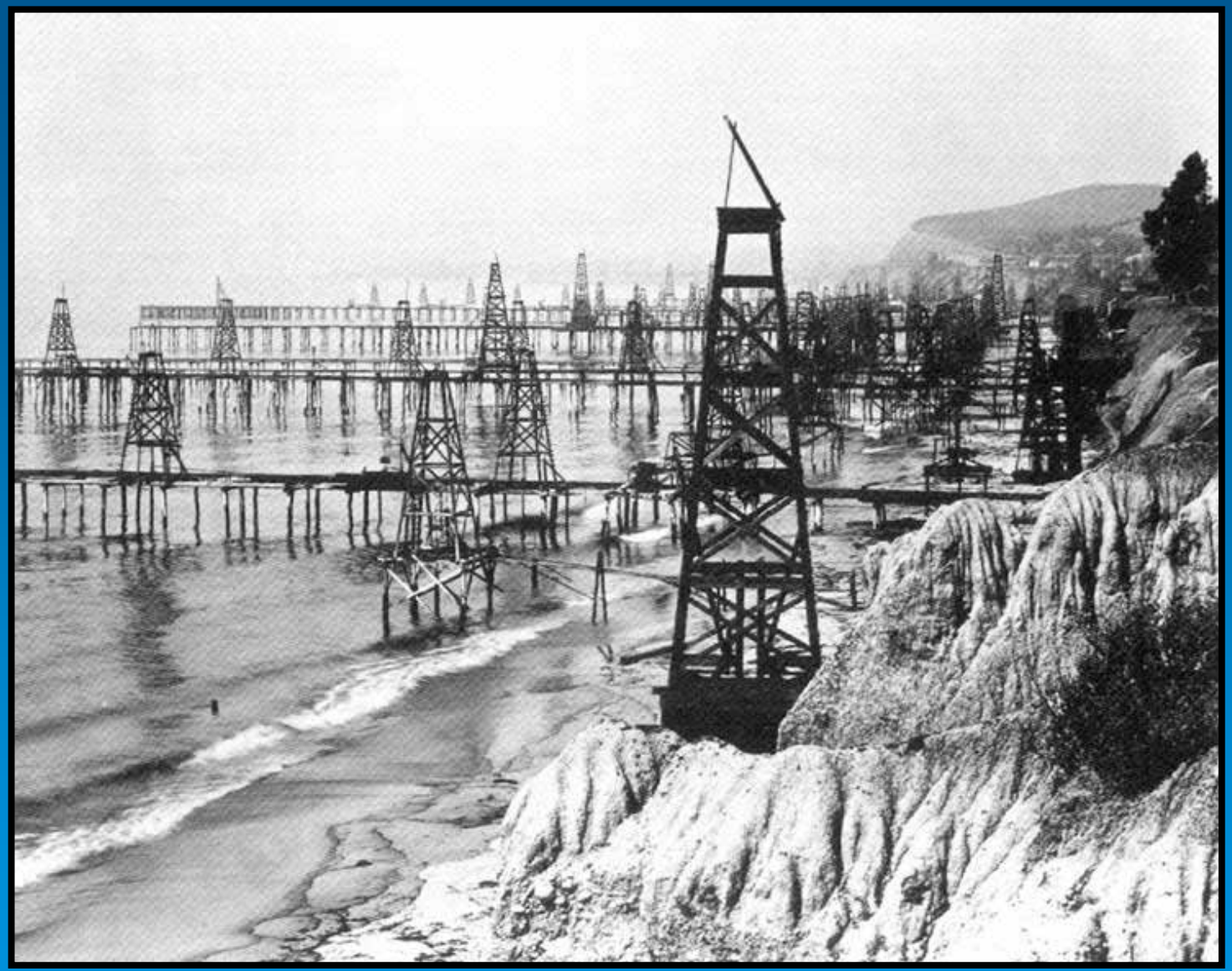
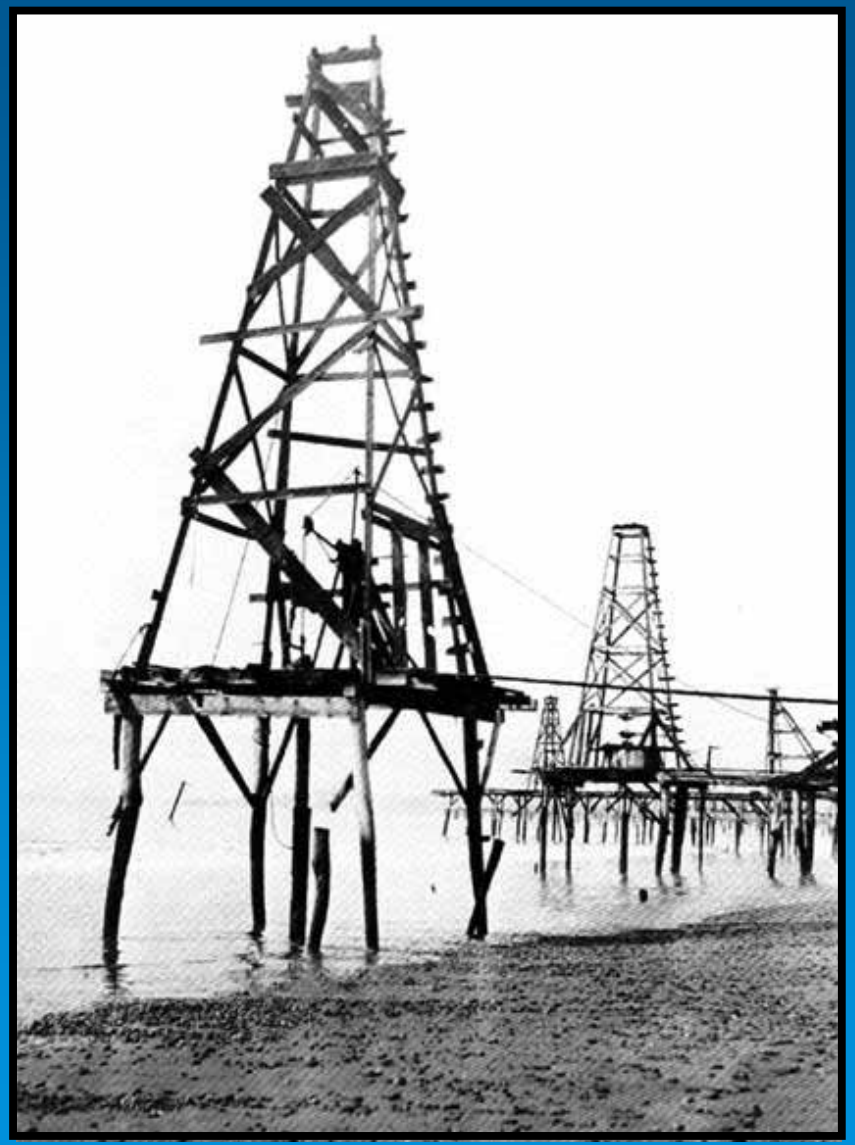
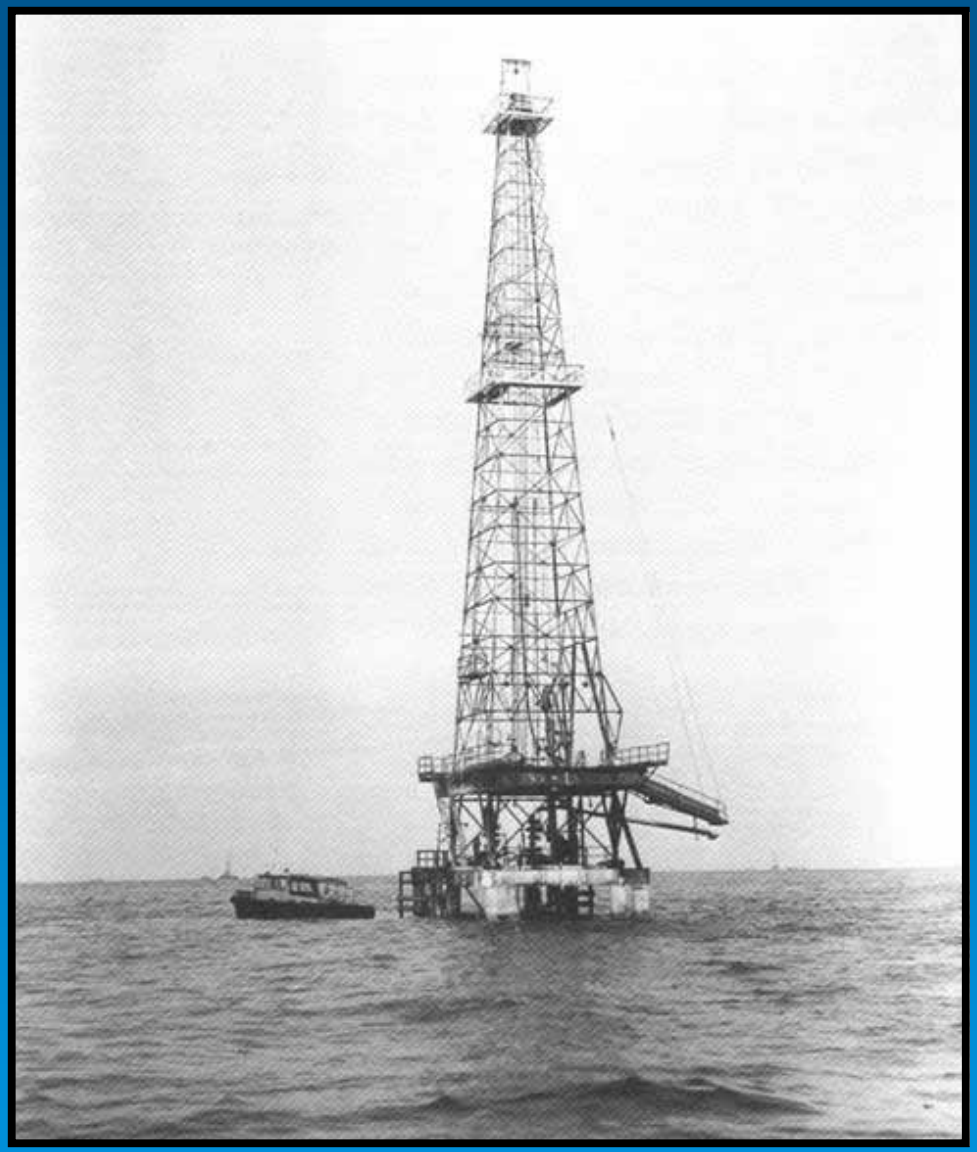
Huntington Beach, California



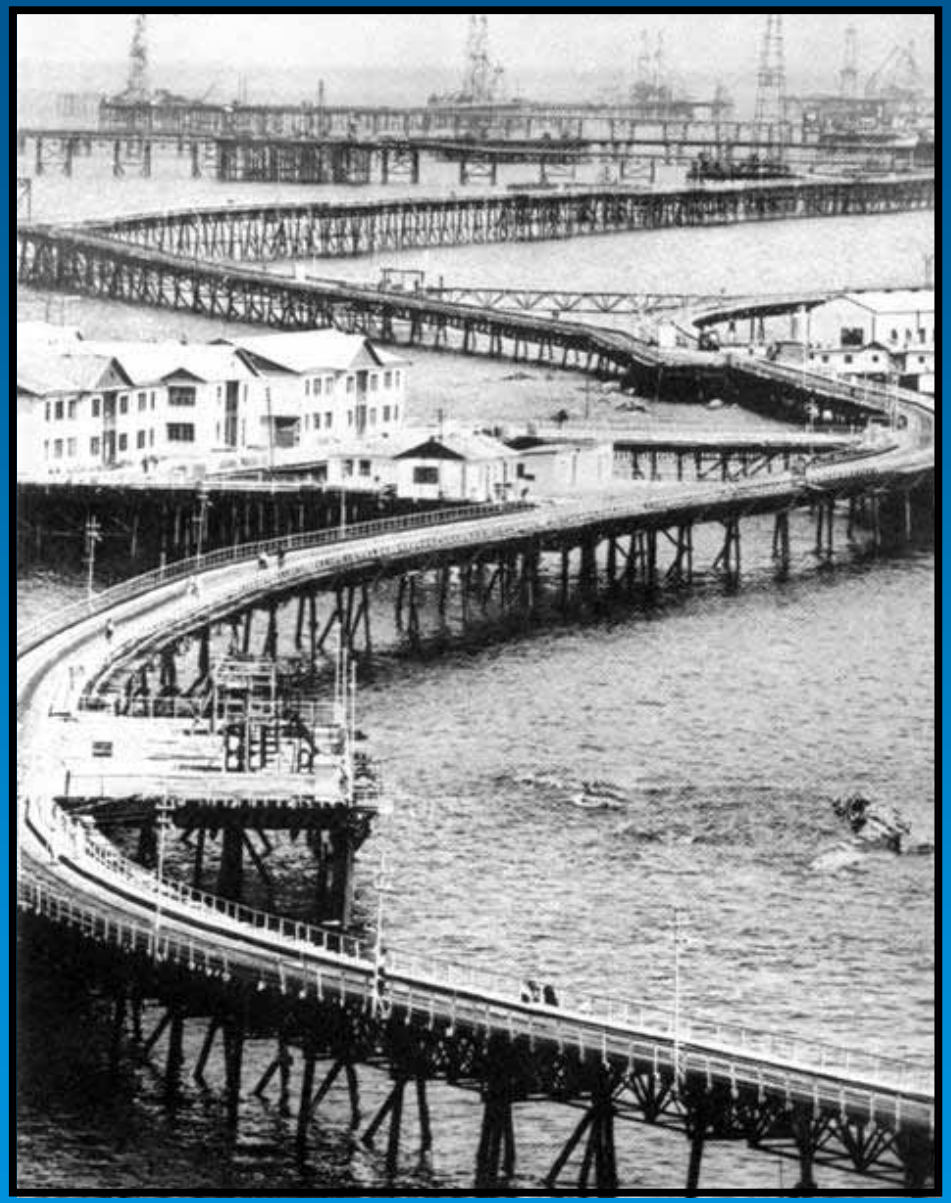
Summerland, California



Production Platform
Summerland, California



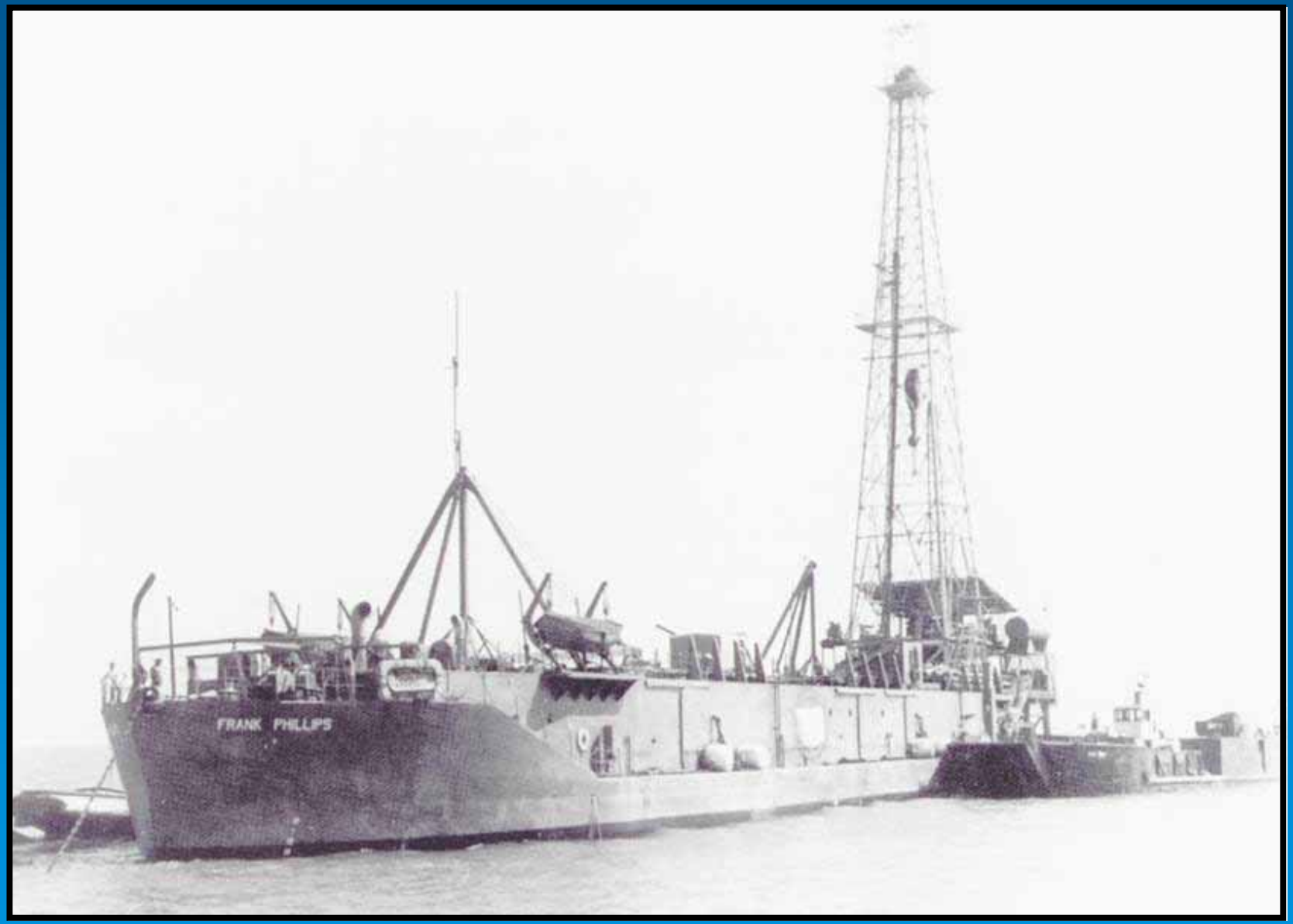
Lake Maracaibo, Venezuela



Caspian Sea Soviet Era Up To 100 KM Offshore

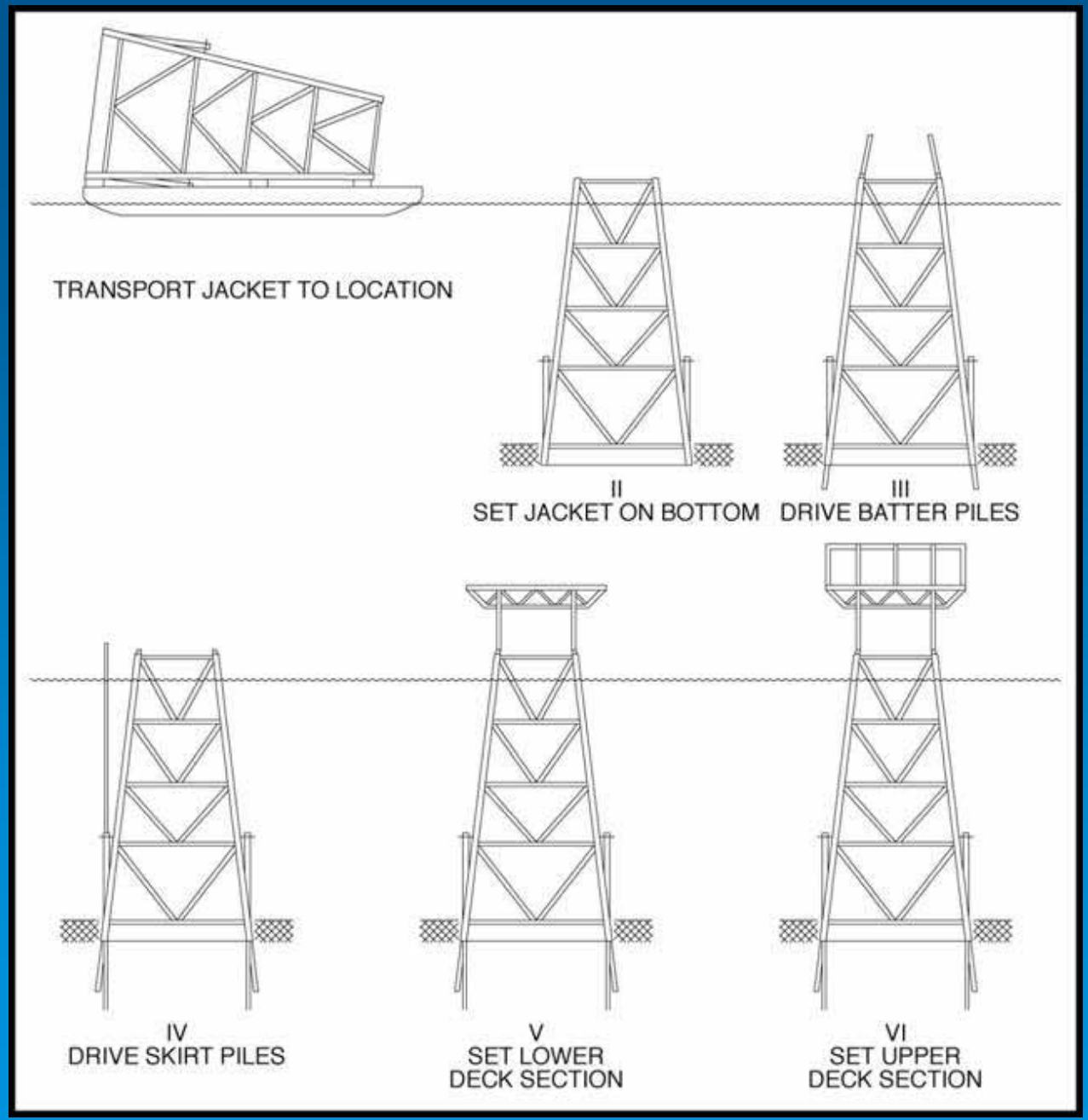
When did the Offshore Industry begin ?

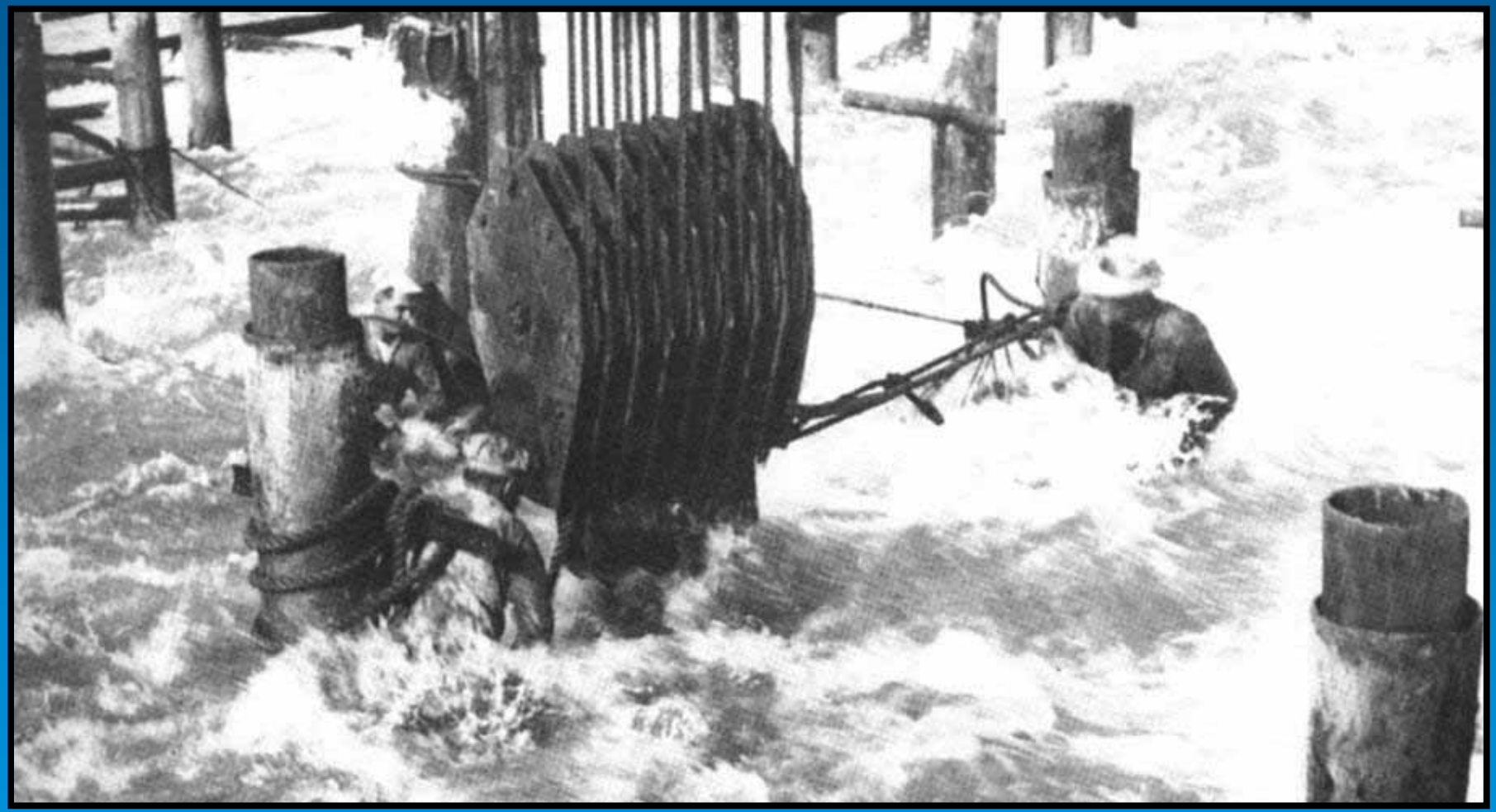

Louisiana
September 9, 1947
Ship Shoal Block 32

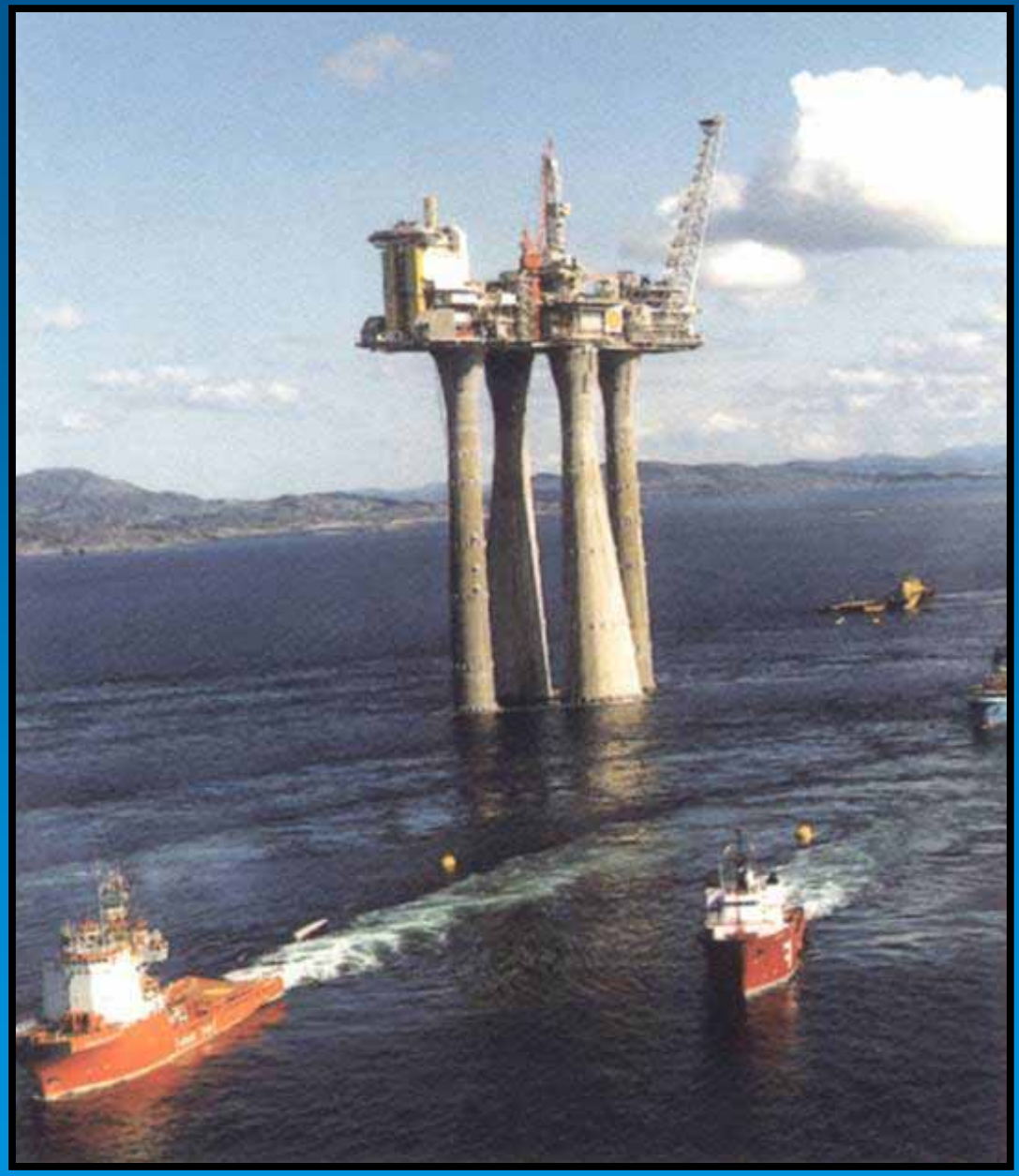

FRANK PHILLIPS

There are 5 basic types of offshore “Oil Rigs”

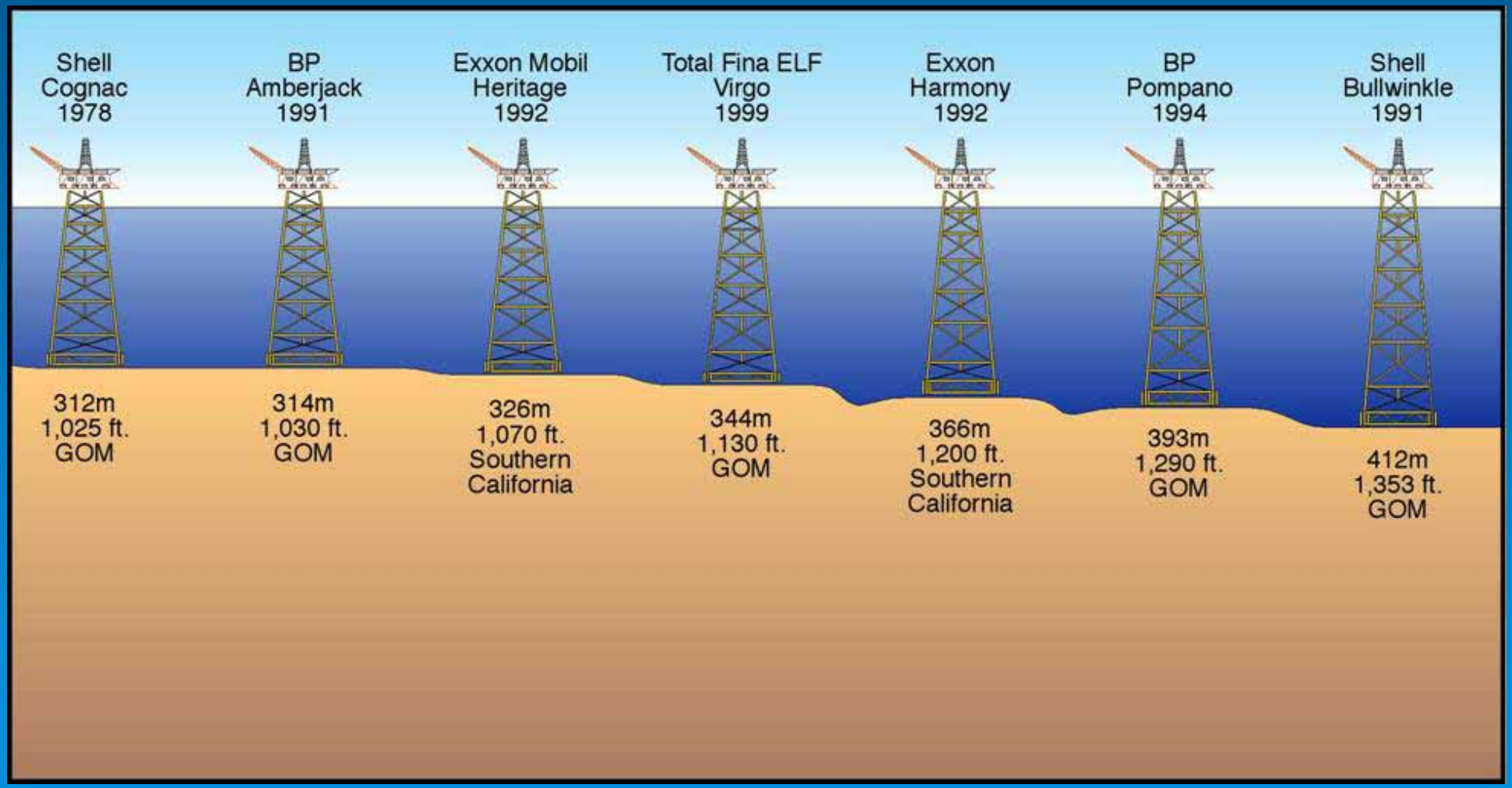
1. Fixed Platforms


TRANSPORT JACKET TO LOCATION
II
SET JACKET ON BOTTOM
III
DRIVE BATTER PILES
IV
DRIVE SKIRT PILES
V
SET LOWER
DECK SECTION
VI
SET UPPER
DECK SECTION

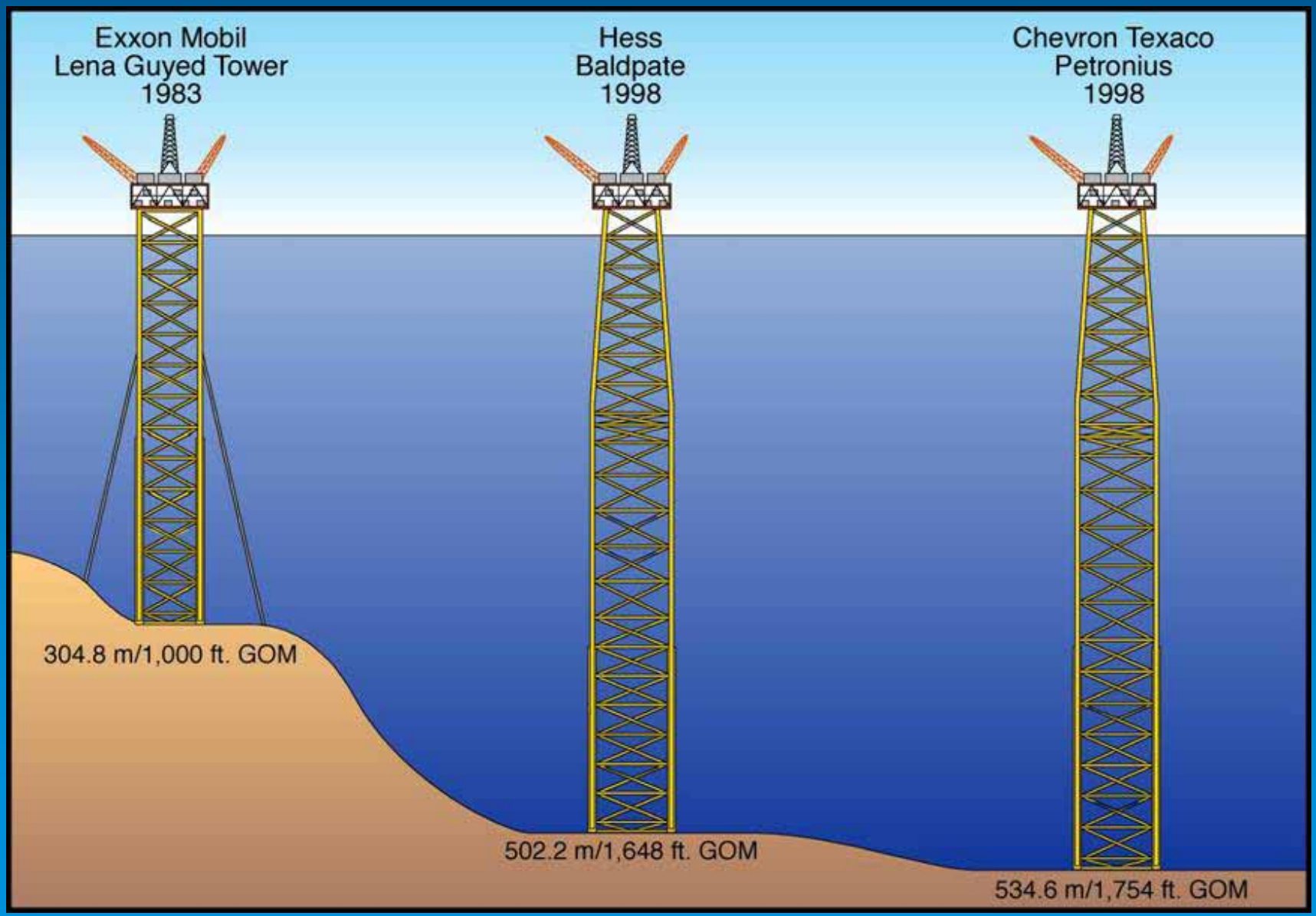




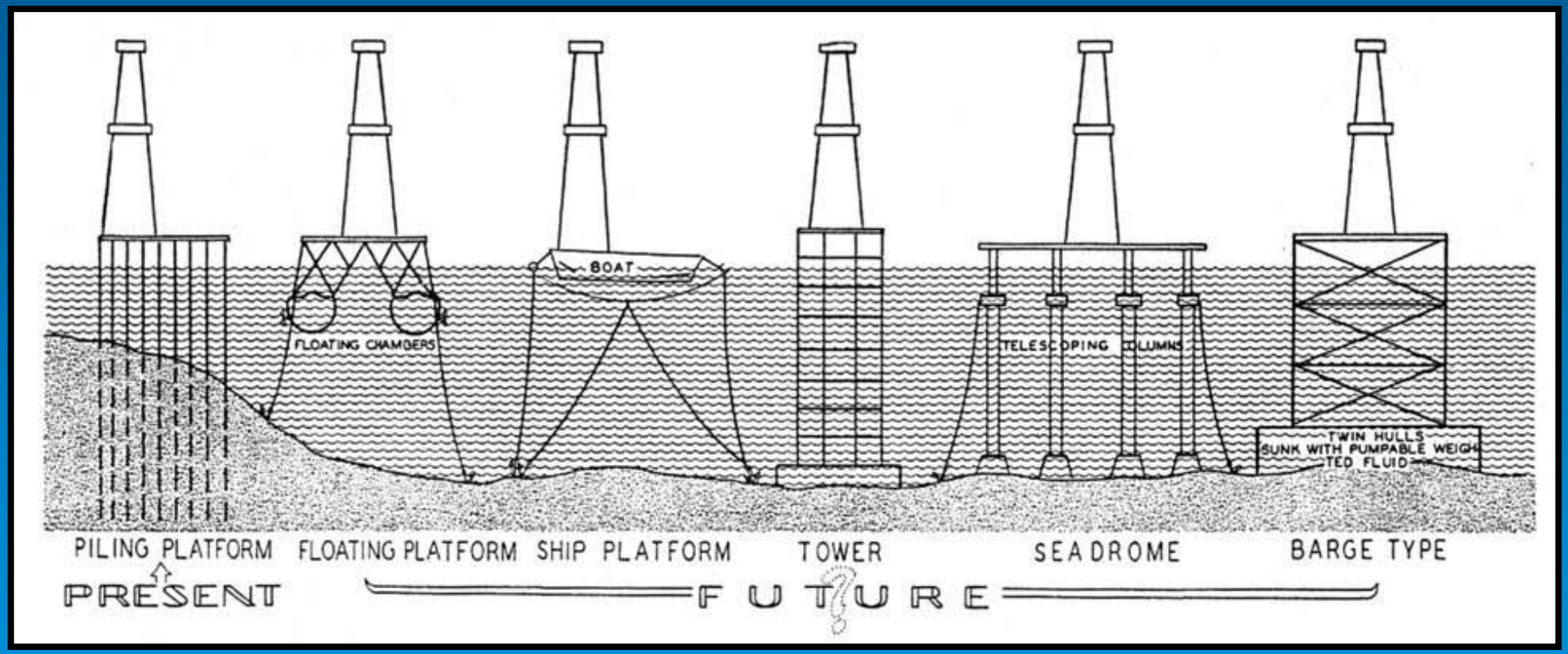
Fixed Platforms (>1000’ or 328m) - Installed or Sanctioned



Compliant Towers (CTs), Compliant Piled Towers (CPTs), Guyed Towers - Installed or Sanctioned



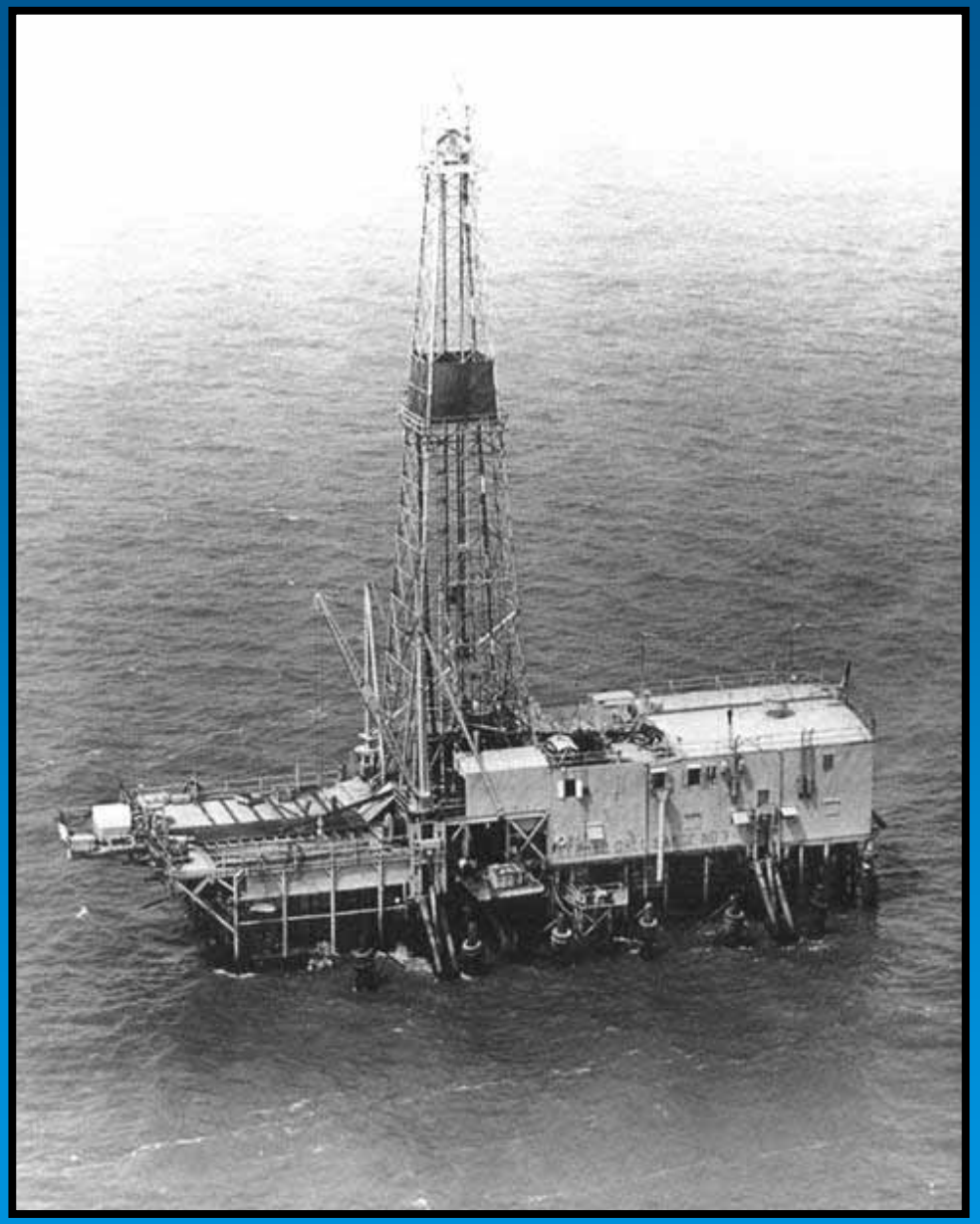
Mobile Offshore Drilling Units



From The Oil & Gas Journal
June 28, 1947

2. Submersibles

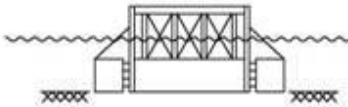
Posted Barge In Louisiana Bayou



World’s First Submersible Drilling Rig “Breton Rig 20”

HAYWARD-BARNSDALL
"BRETON RIG 20"
(TRANSWORLD RIG 40)

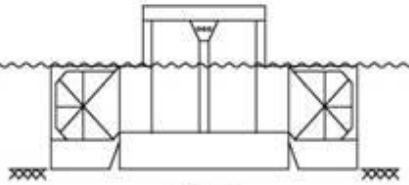
MOVABLE
PONTOONS



1950

ODECO
"MR. CHARLIE"

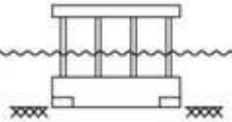
HINGED
PONTOONS



1954

CALC
"S-44"

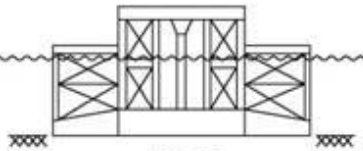
RECESSED
PADS



1954

ODECO
"JOHN HAYWARD"

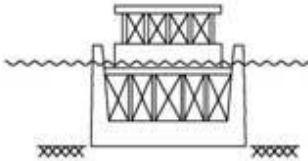
FIXED HULL
EXTENSIONS



1955

PENROD DRYDOCK
(PHILLIPS RIG 42)

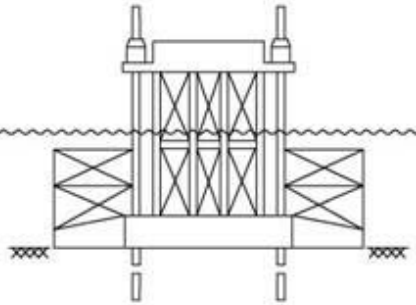
FLOATING
DRYDOCK



1955

OFSHORE "NO. 53"

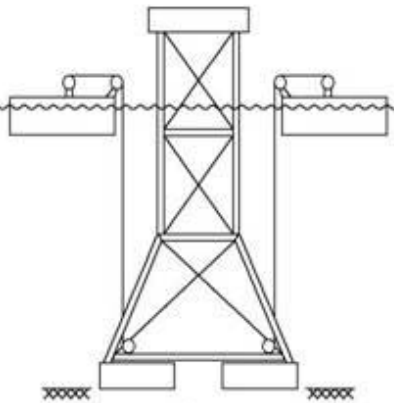
FIXED HULL
EXTENSIONS
& SPUDS



1955

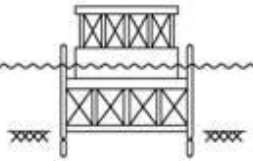
NATIONAL COAL BOARD
(ENGLAND)

CABLE CONTROLLED



1955

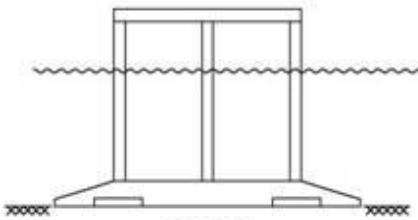
MAGNOLIA "RIG 52"
BIRD-ON-A-NEST



1956

CALCO "S-55"

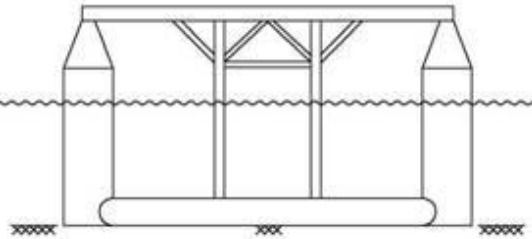
STREAMLINED HULL



1956

TRANSWORLD "RIG-46"

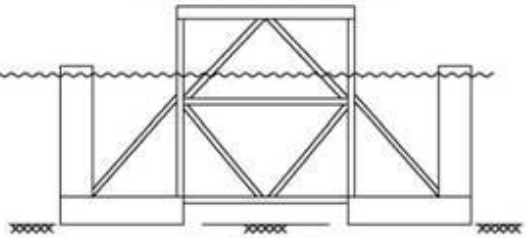
BOTTLE TYPE



1956

ODECO "MARGARET"

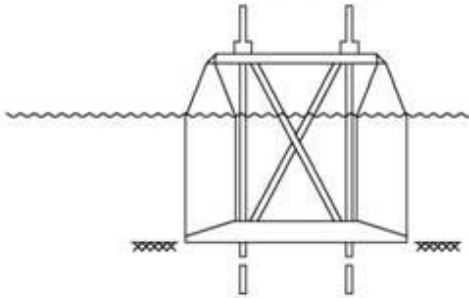
CATAMARAN HULL WITH BOTTLES



1957

RENROD "RIG 50"

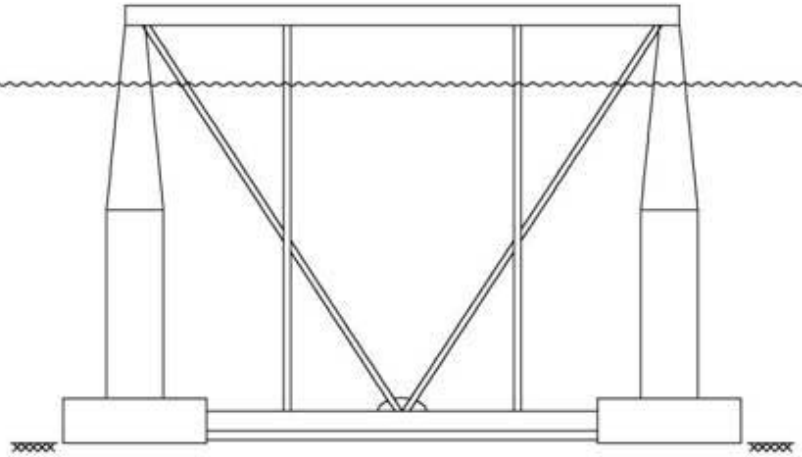
BOTTLES & SPUDS



1958

TRANSWORLD "RIG 54"

TRIANGULAR SHAPE



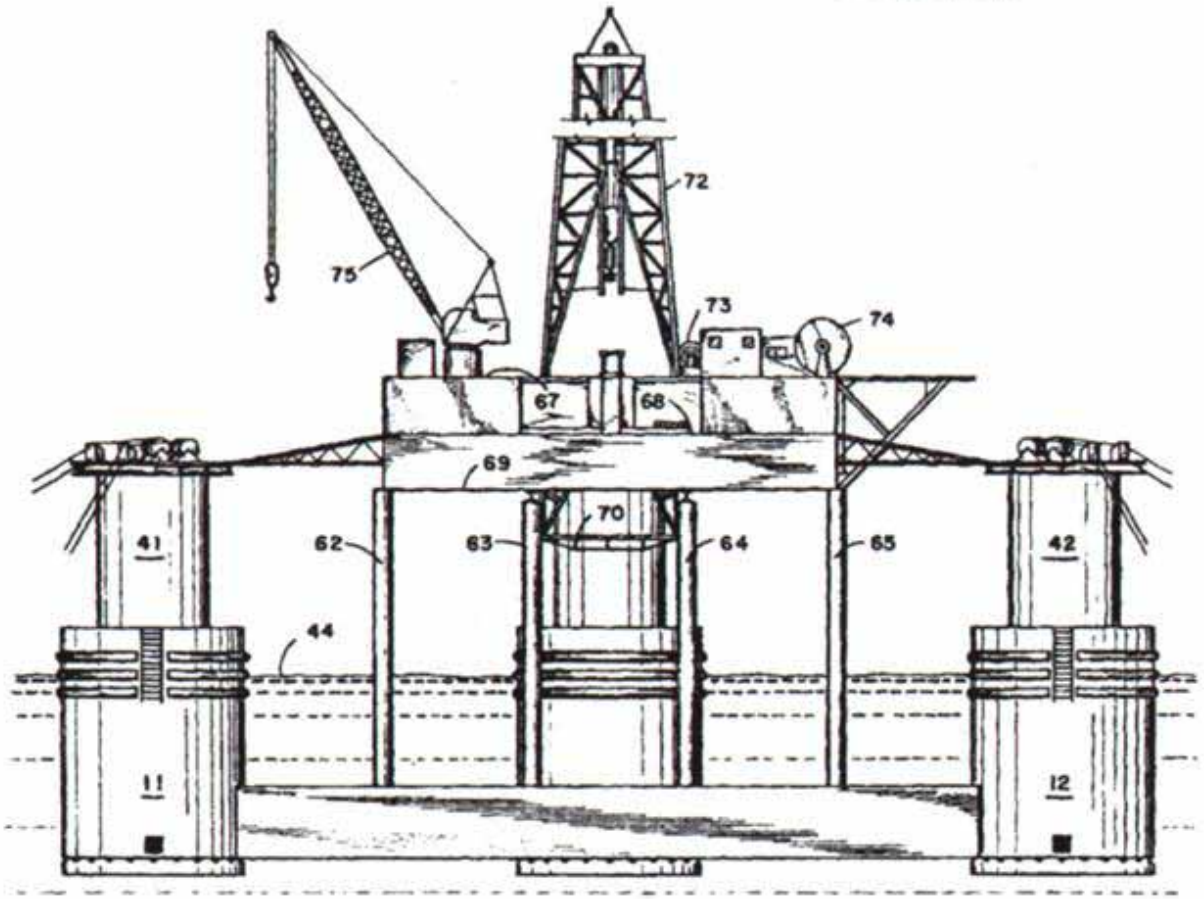
1963

3. Semisubmersibles

Dec. 29, 1964 B. G. COLLIPP 3,163,147

FLOATING DRILLING PLATFORM

Filed May 22, 1961 6 Sheets-Sheet 1

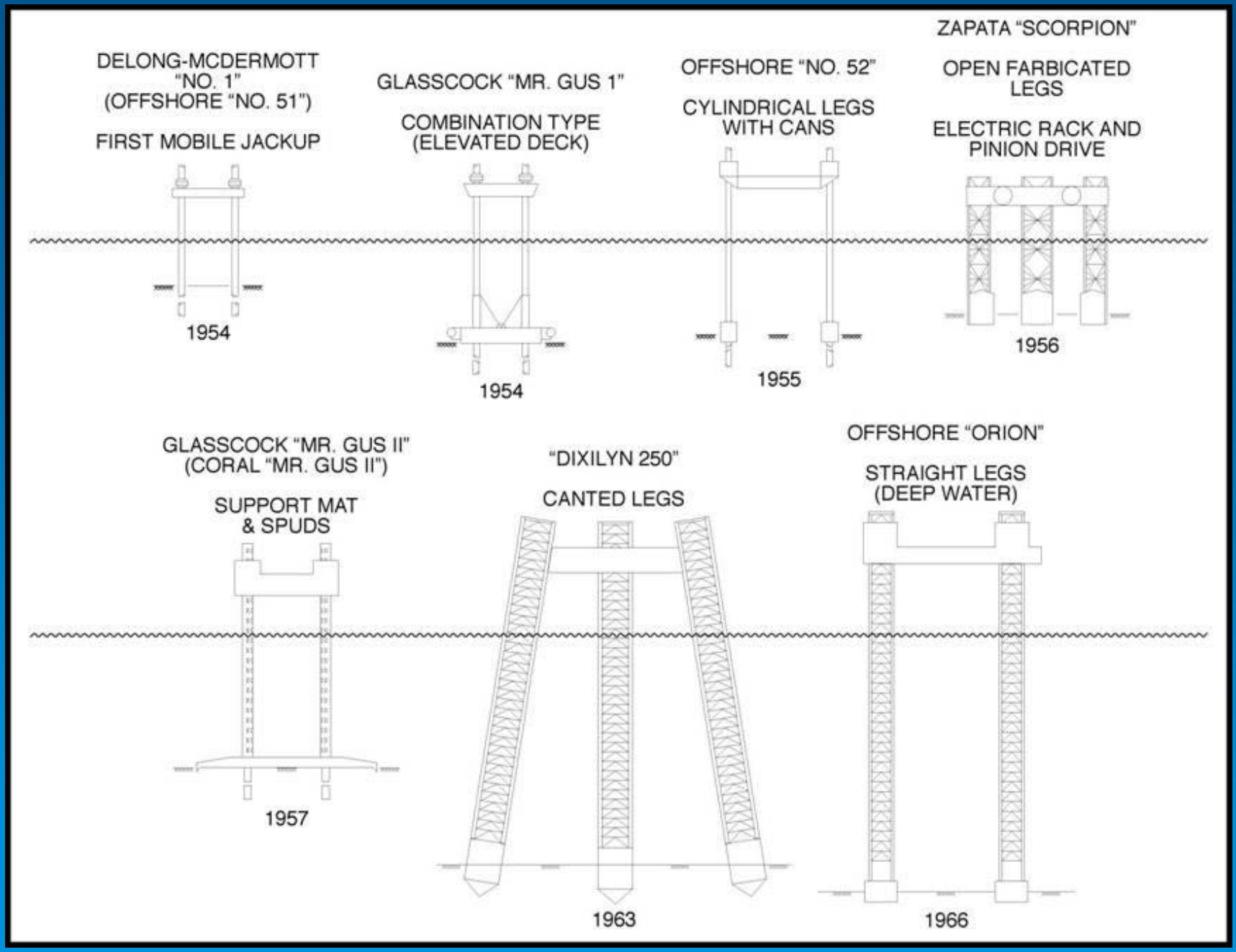


INVENTOR:
B. G. COLLIPP
BY: J. H. McCarthy
HIS AGENT

World’s First Semisubmersible Bluewater I


Noble Max Smith
NOBLE

4. Jackups


DELONG-MCDERMOTT
"NO. 1"
(OFFSHORE "NO. 51")
FIRST MOBILE JACKUP
1954
GLASSCOCK "MR. GUS 1"
COMBINATION TYPE
(ELEVATED DECK)
1954
OFFSHORE "NO. 52"
CYLINDRICAL LEGS
WITH CANS
1955
ZAPATA "SCORPION"
OPEN FARBICATED
LEGS
ELECTRIC RACK AND
PINION DRIVE
1956
GLASSCOCK "MR. GUS II"
(CORAL "MR. GUS II")
SUPPORT MAT
& SPUDS
1957
"DIXILYN 250"
CANTED LEGS
1963
OFFSHORE "ORION"
STRAIGHT LEGS
(DEEP WATER)
1966

Offshore Company’s No. 51

World’s First Mobile Jackup


Noble Tommy Craighead
NOBLE

5. Drillships

World’s First Drillship: Submarex

CUSS GROUP
"SUBMAREX"
(GLOBAL MARINE
"SUBMAREX")

OVER-THE-SIDE
CORING BARGE

1953

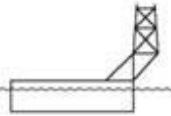
SOCAL
"WESTERN EXPLORER"
(GLOBAL MARINE
"WESTERN EXPLORER"

CENTERLINE BARGE

1955

BROWN AND ROOT -
MCCLELLAND
ENGINEERS "U-303"

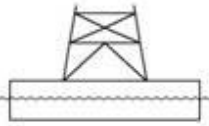
OVER-THE-SIDE
RECTANGUALR
CORING BARGE



1956

OFFSHORE
"D-1"

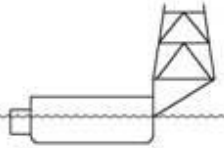
CENTERLINE
BARGE



1958

ZAPATA
"NOLA I"
(GOLDEN LANE
"MERCURY")

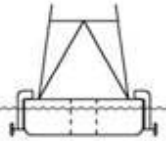
OVER-THE-SIDE
BARGE



1959

GLOBAL MARINE
"CUSS I"

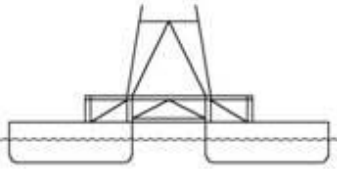
DYNAMIC
POSITIONING



1961

READING & BATES
"C.P. BAKER"

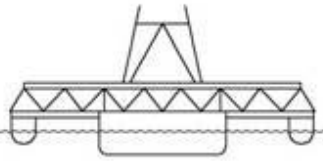
CATAMARAN



1962

ZAPATA
"SIDEWINDER"

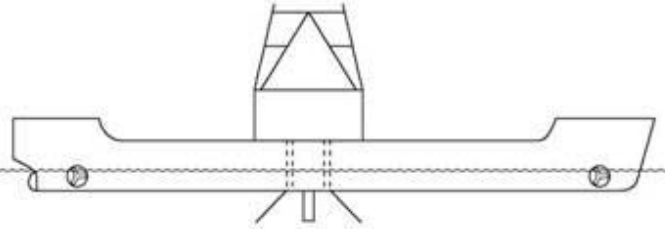
OUTRIGERS

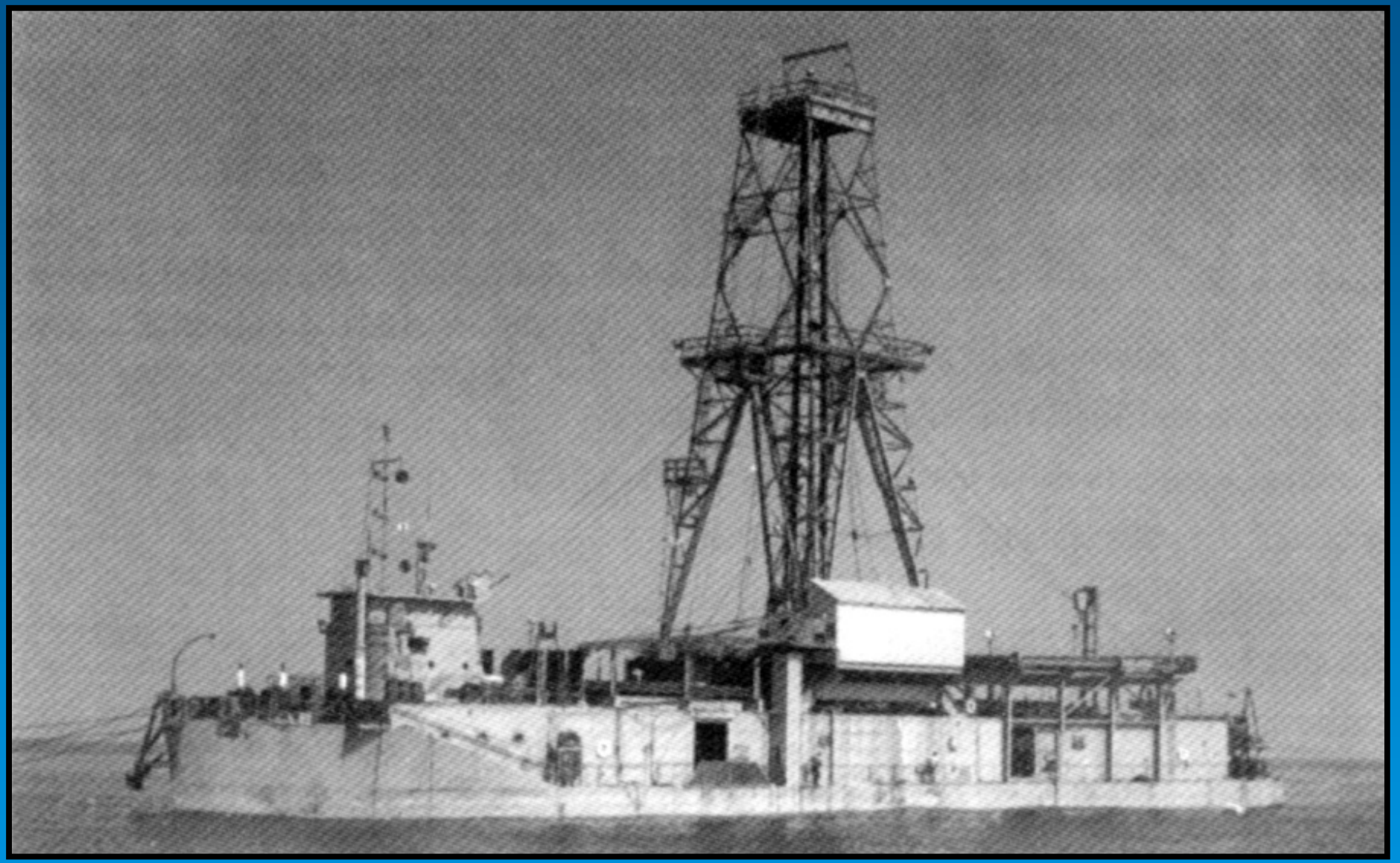


1963

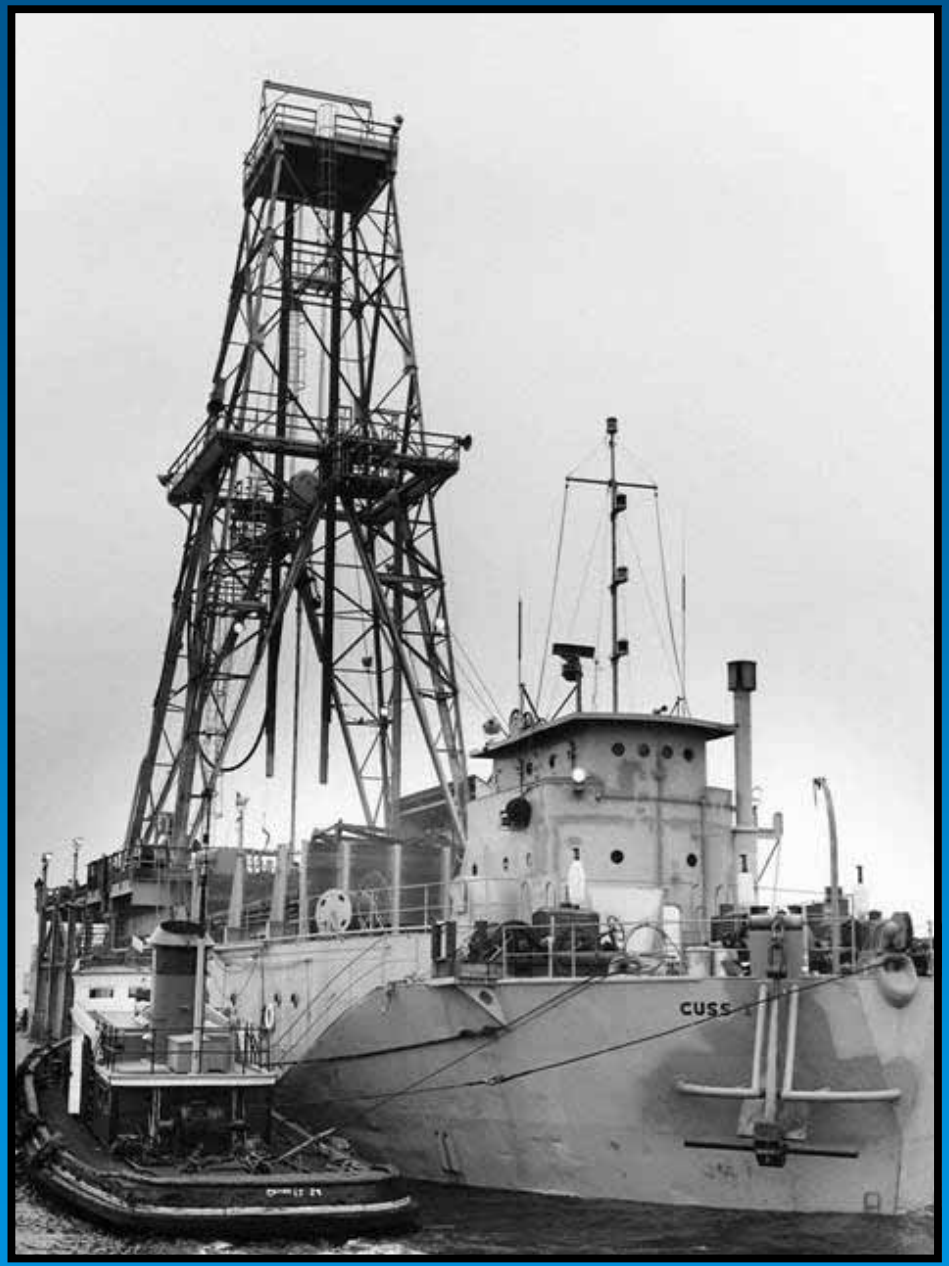
OFFSHORE "DISCOVERER"

TURRET MOORING
(WITH THRUSTERS)





Drillship Cuss-I


CUSS

Zapata Sidewinder

Offshore Malaysia,

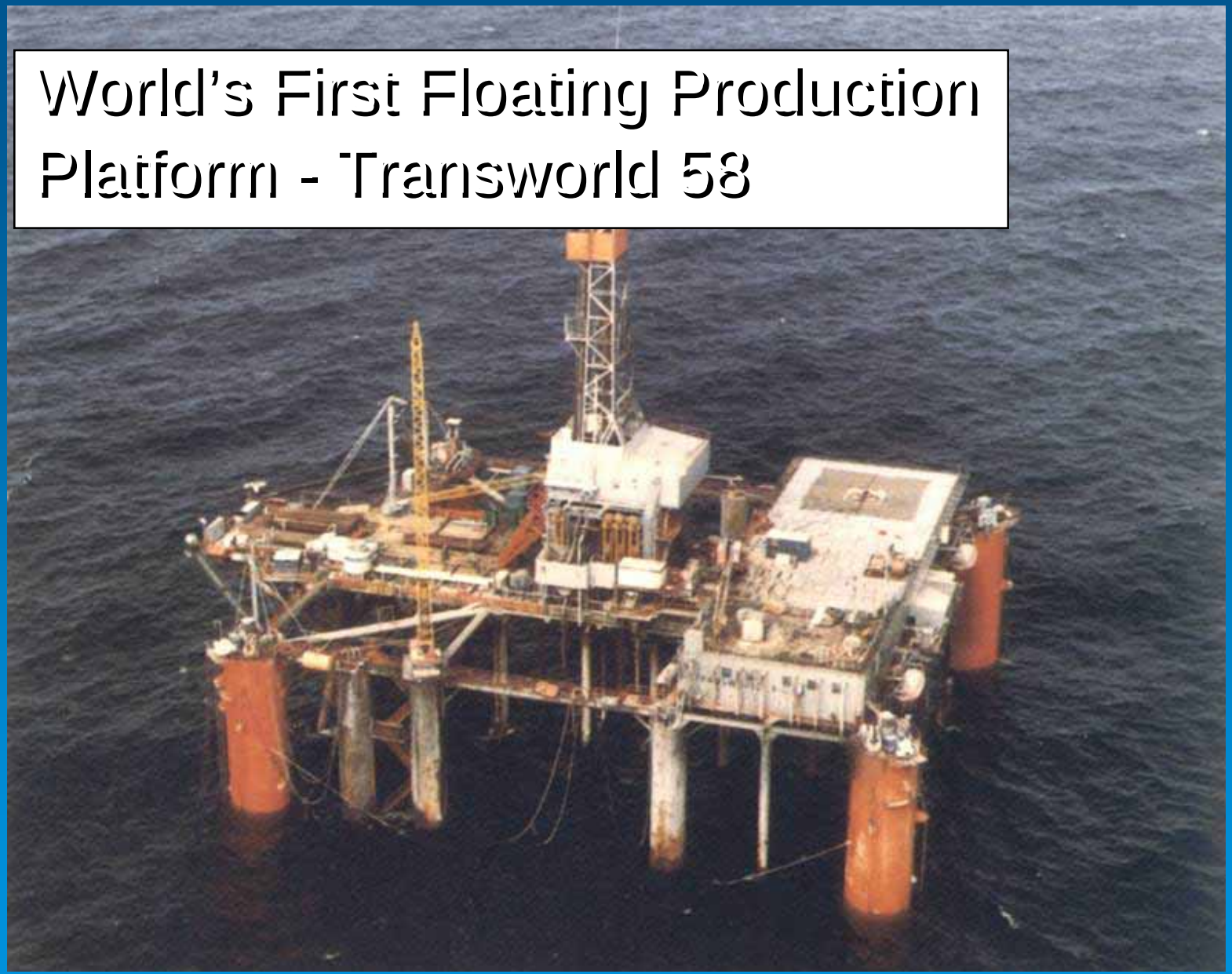
1963

Mobile Offshore Drilling Units
2004 Fleet

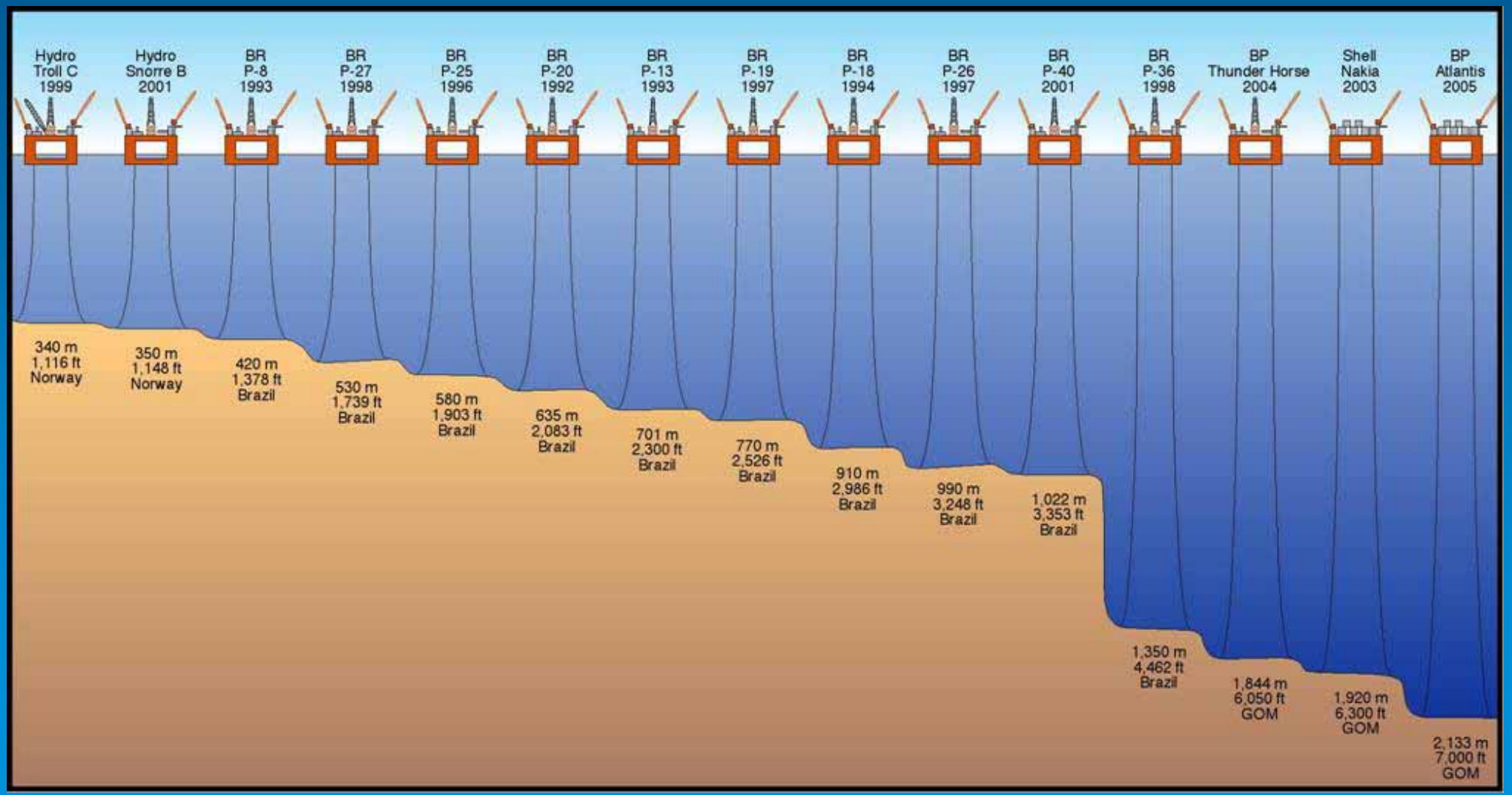
- Jackups - 389
- Semisubmersibles - 166
- Drillships - 40
- Drill Barges - 22 (51 with Lake Maricaibo)
- Tenders - 24
- Submersibles - 10 (includes 3 Arctic rigs)

Floating Production Systems

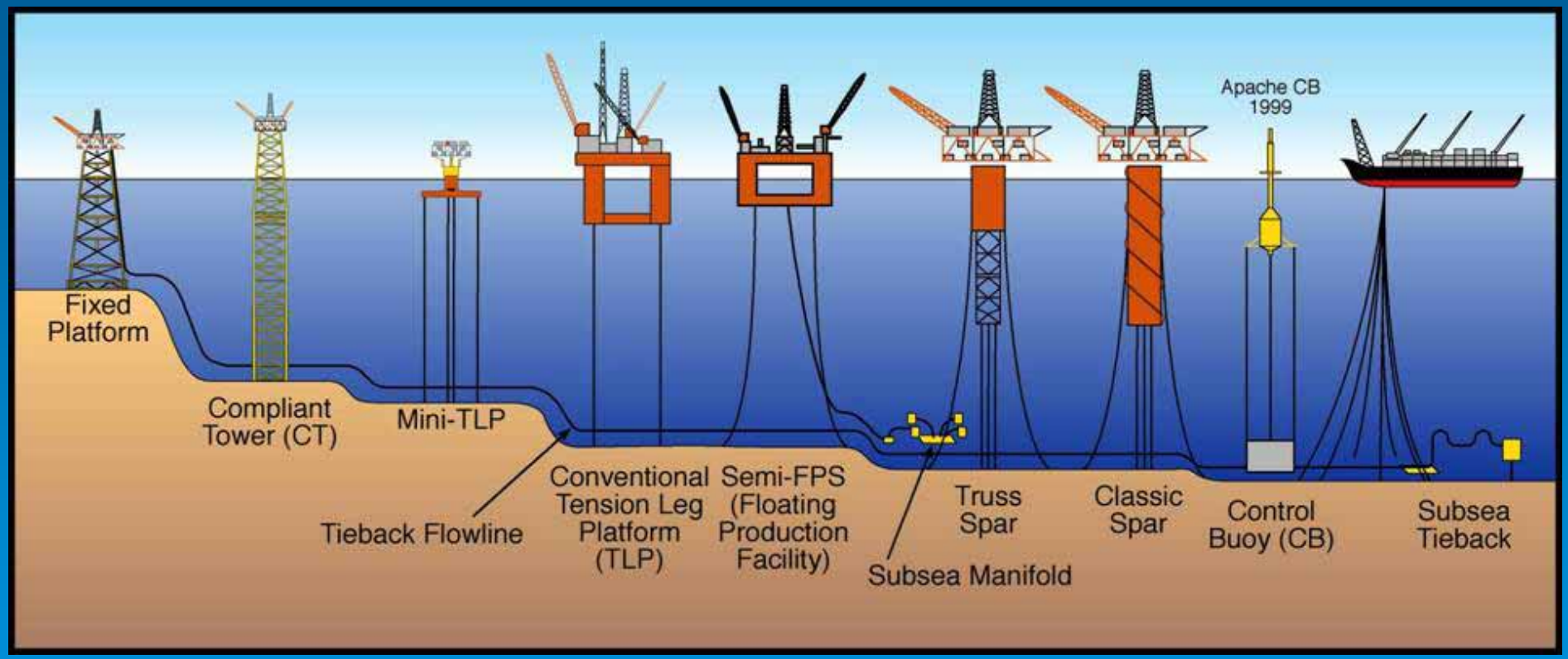
World's First Floating Production Platform - Transworld 58



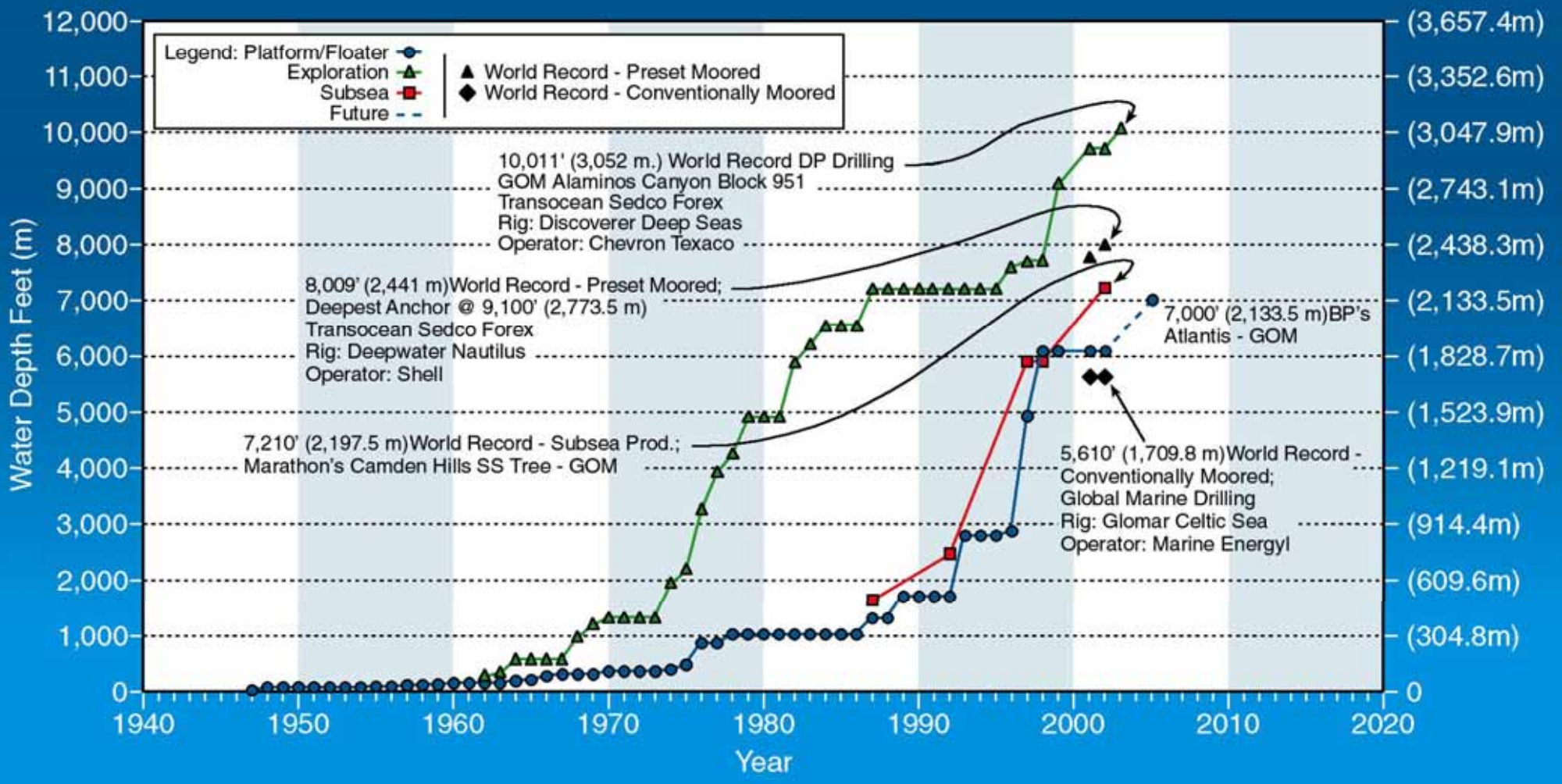
Semisubmersible Floating Production Systems
15 Deepest Units - Installed or Sanctioned



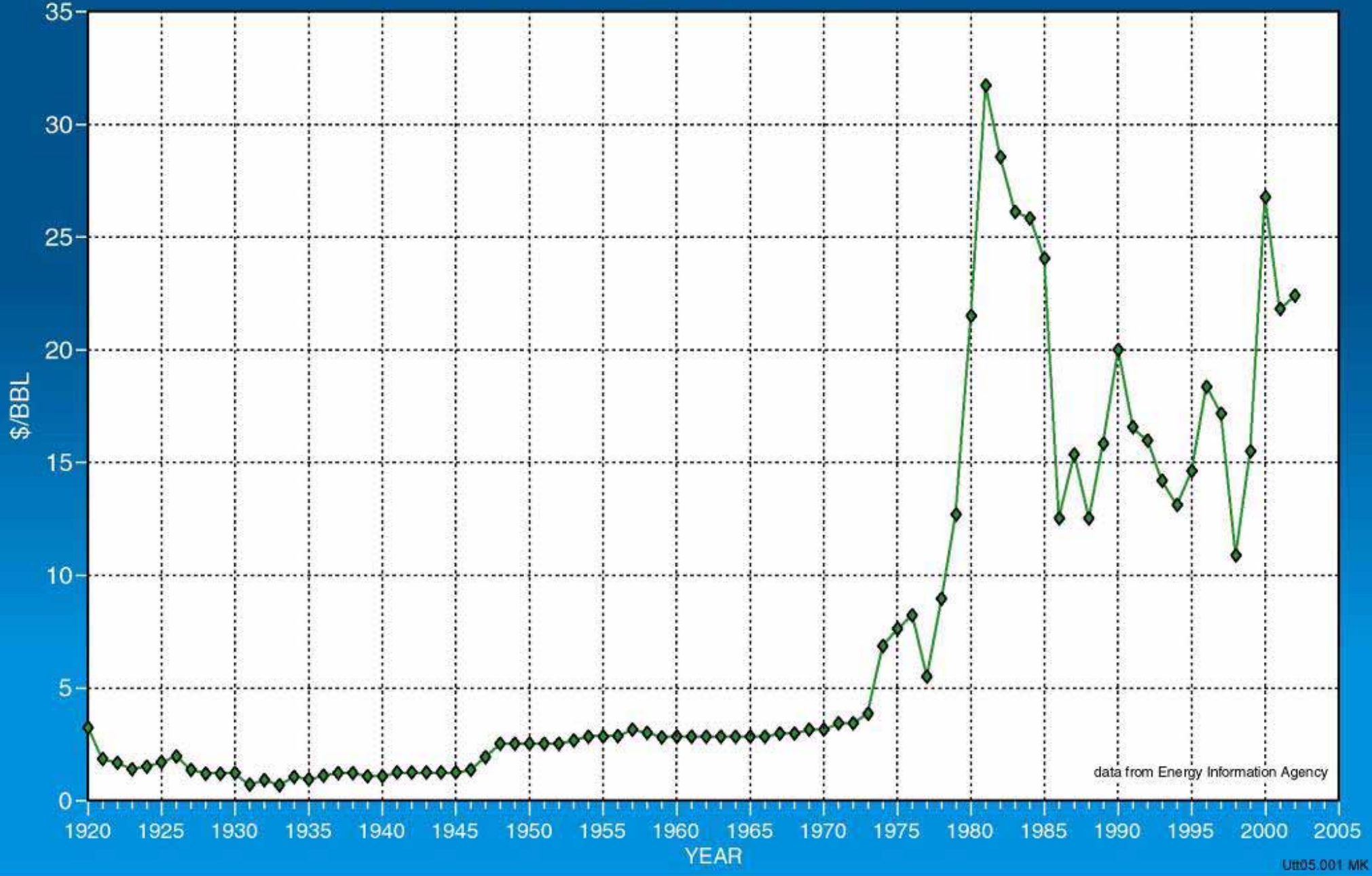
Deepwater Systems Types



Worldwide Progression of Water Depth Capabilities for Drilling and Production

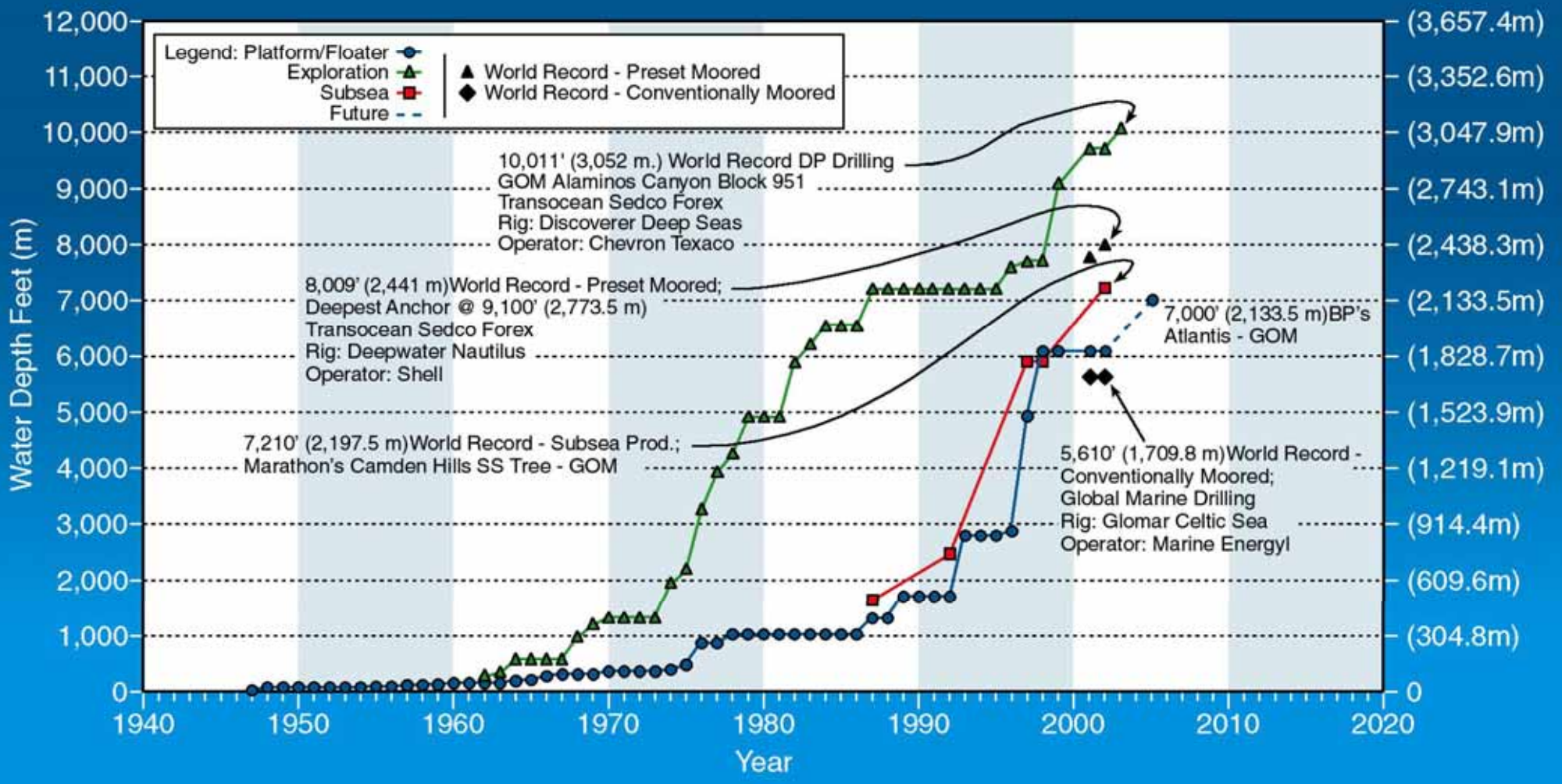


U.S. First Purchaser's Crude Oil Price

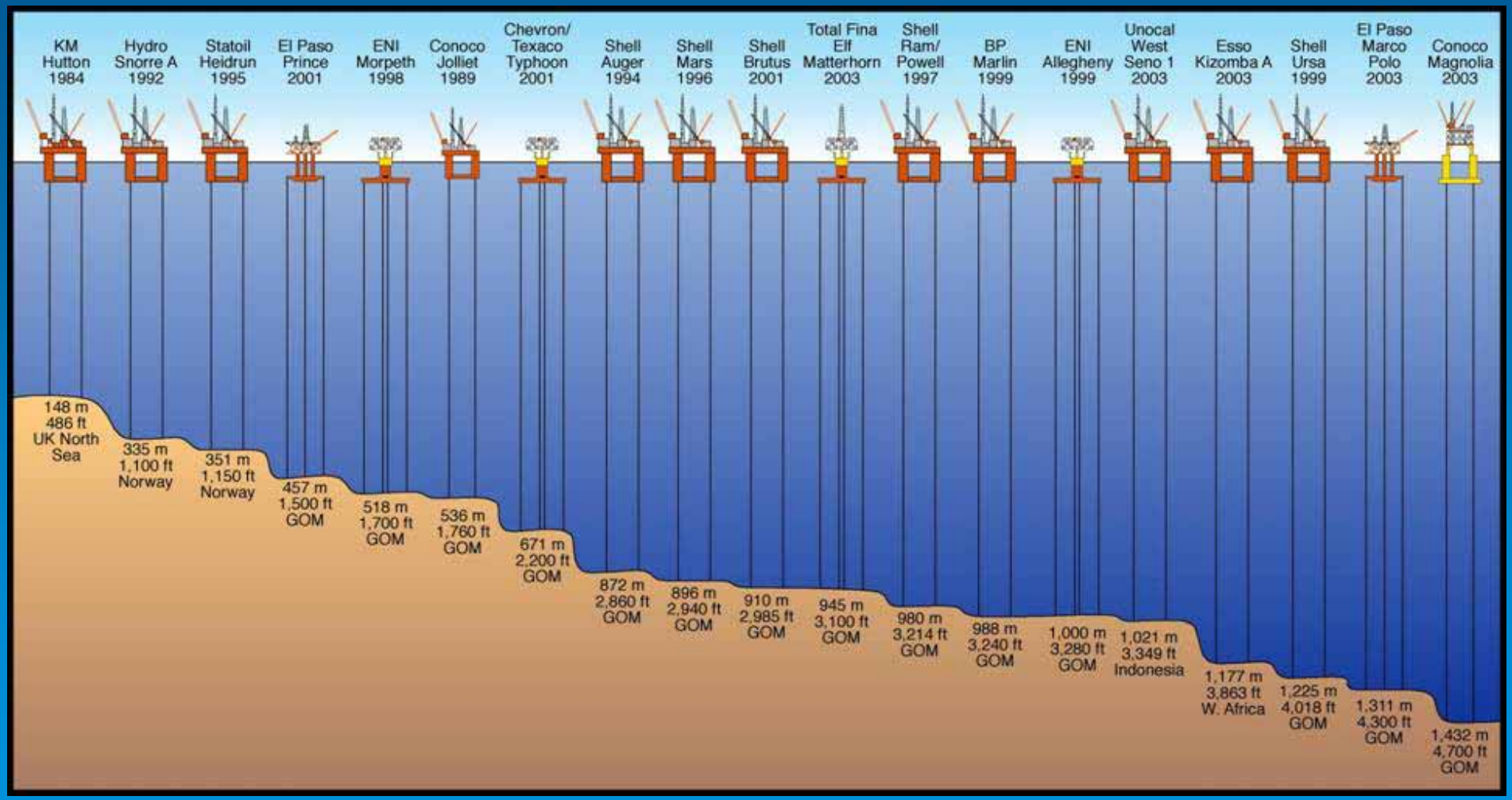


Utt05.001 MK

Worldwide Progression of Water Depth Capabilities for Drilling and Production

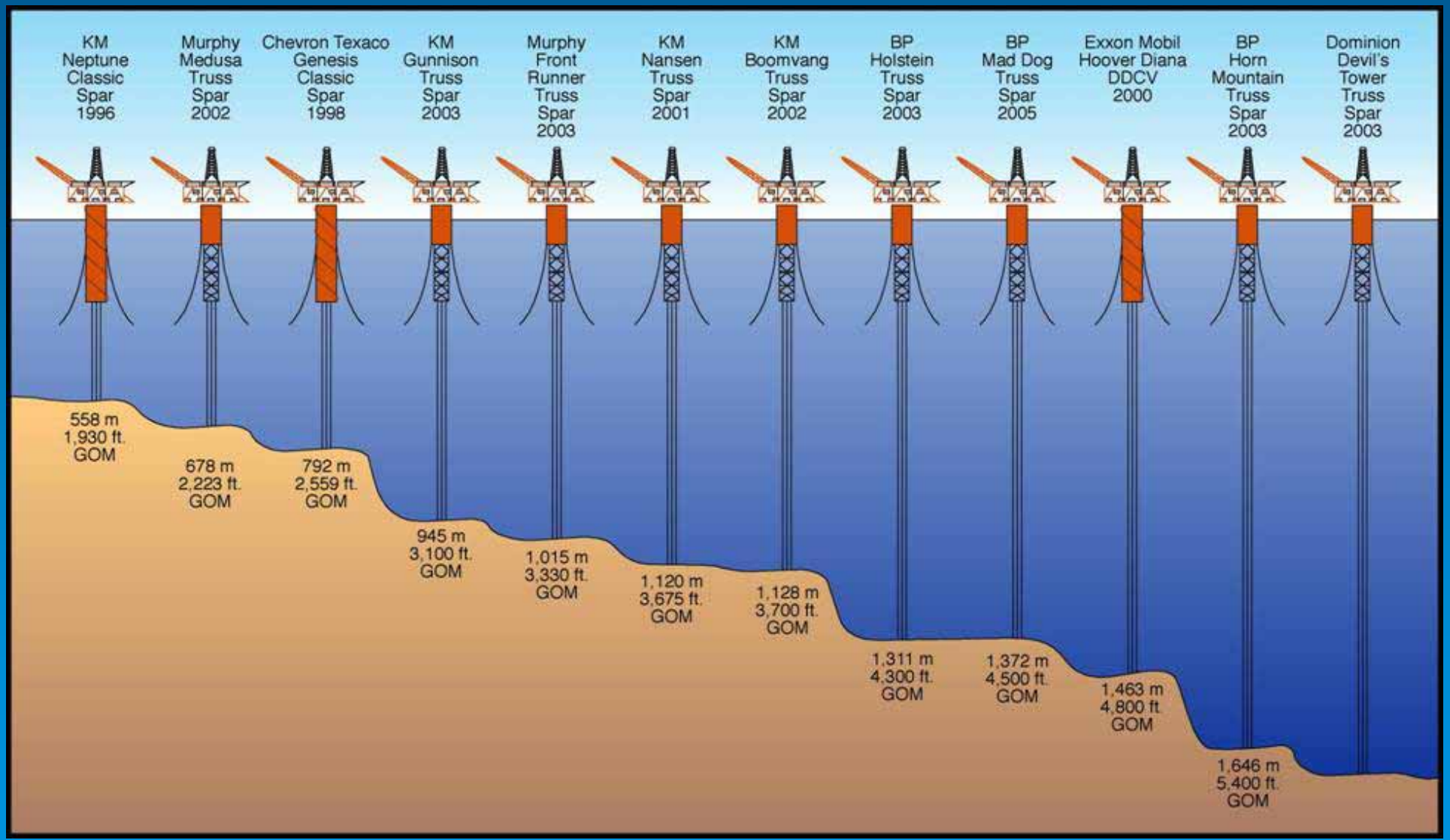


TLPs Tension Leg Platforms - Installed or Sanctioned

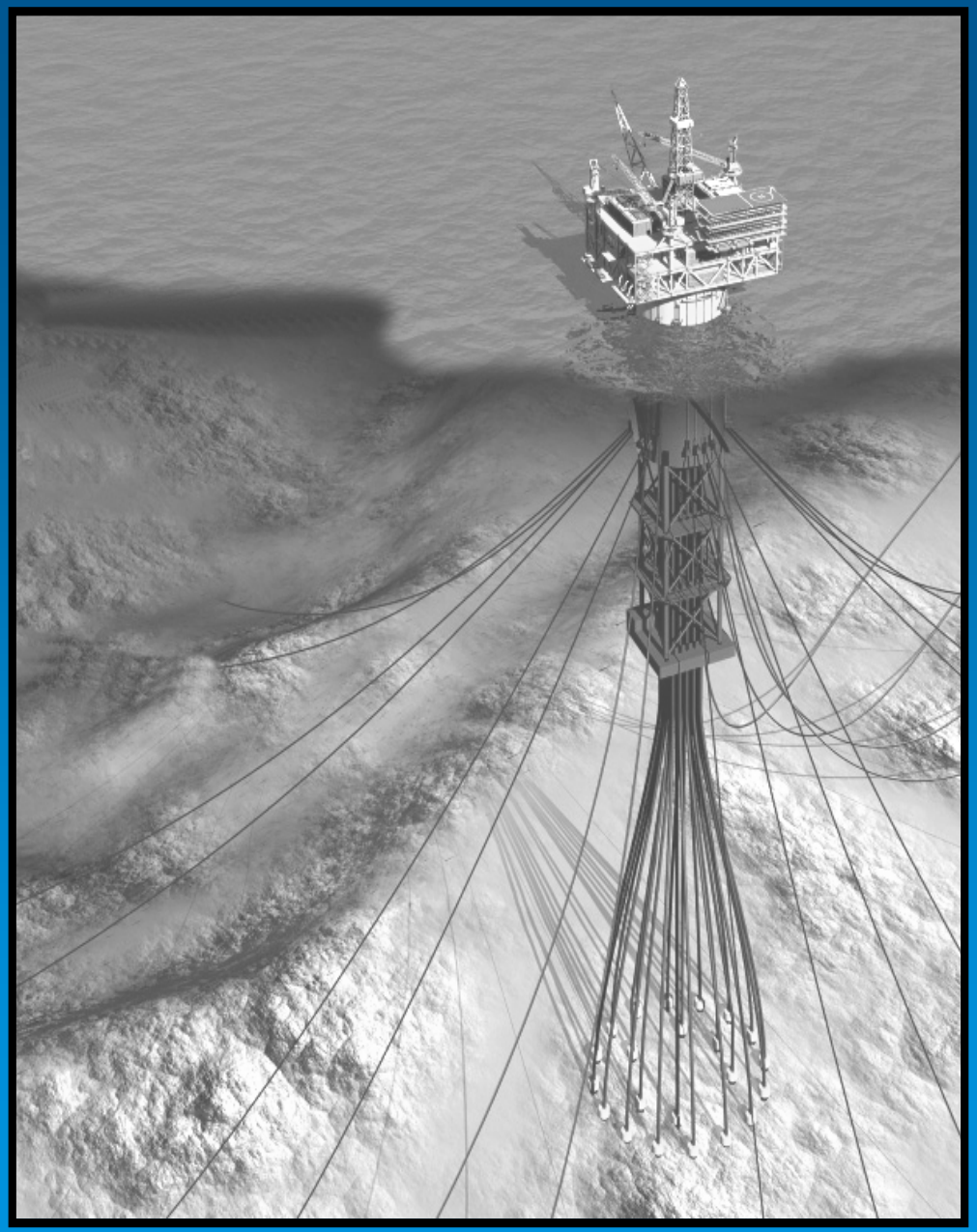



AMERICAN CORMORANT

Spars, Deep Draft Floaters (DDFs), Caisson Production Units (CPUs), Deep Draft Caisson Vessels (DDCVs), Single Column Floaters (SCFs) - Installed or Sanctioned

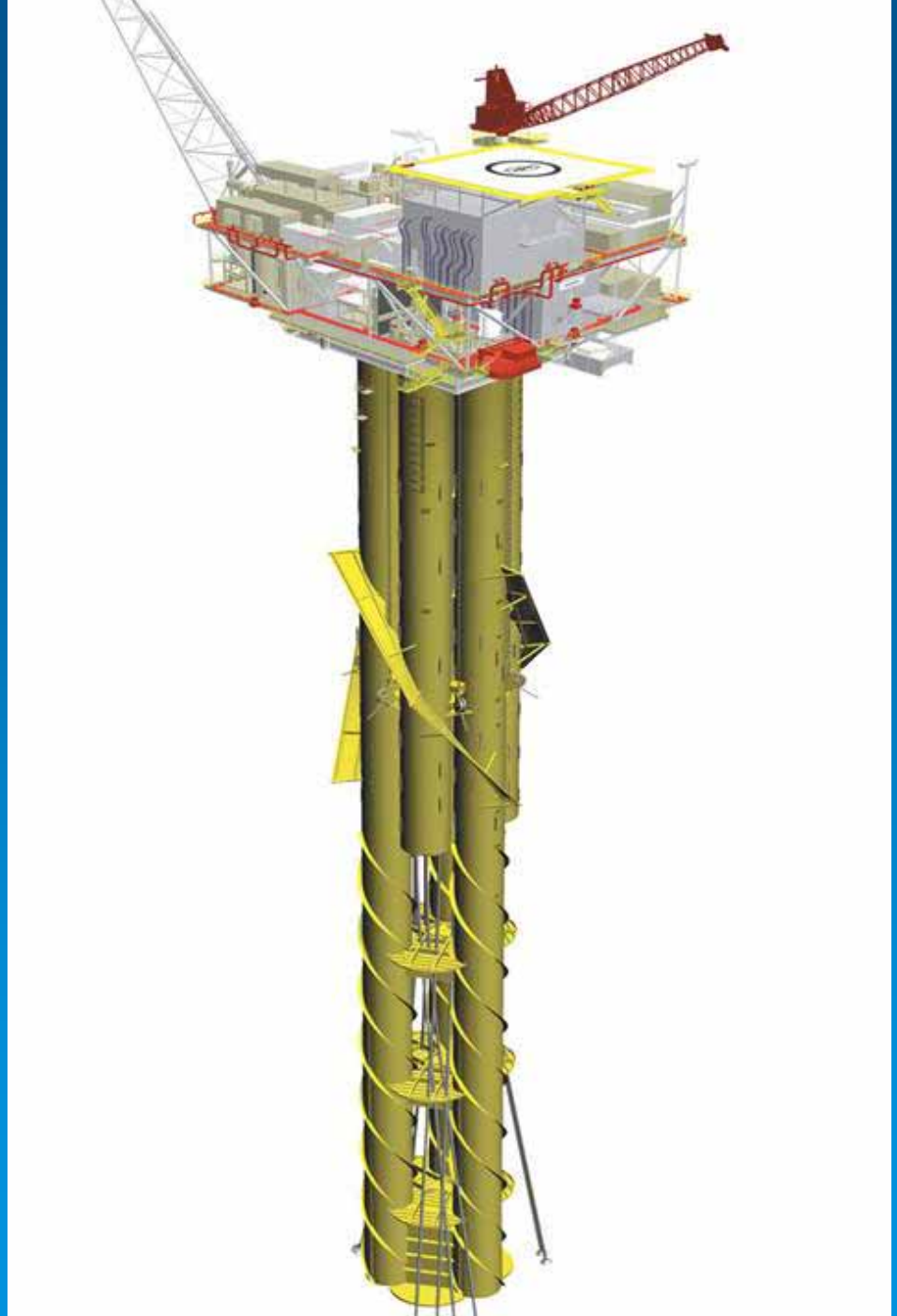


Genesis Spar



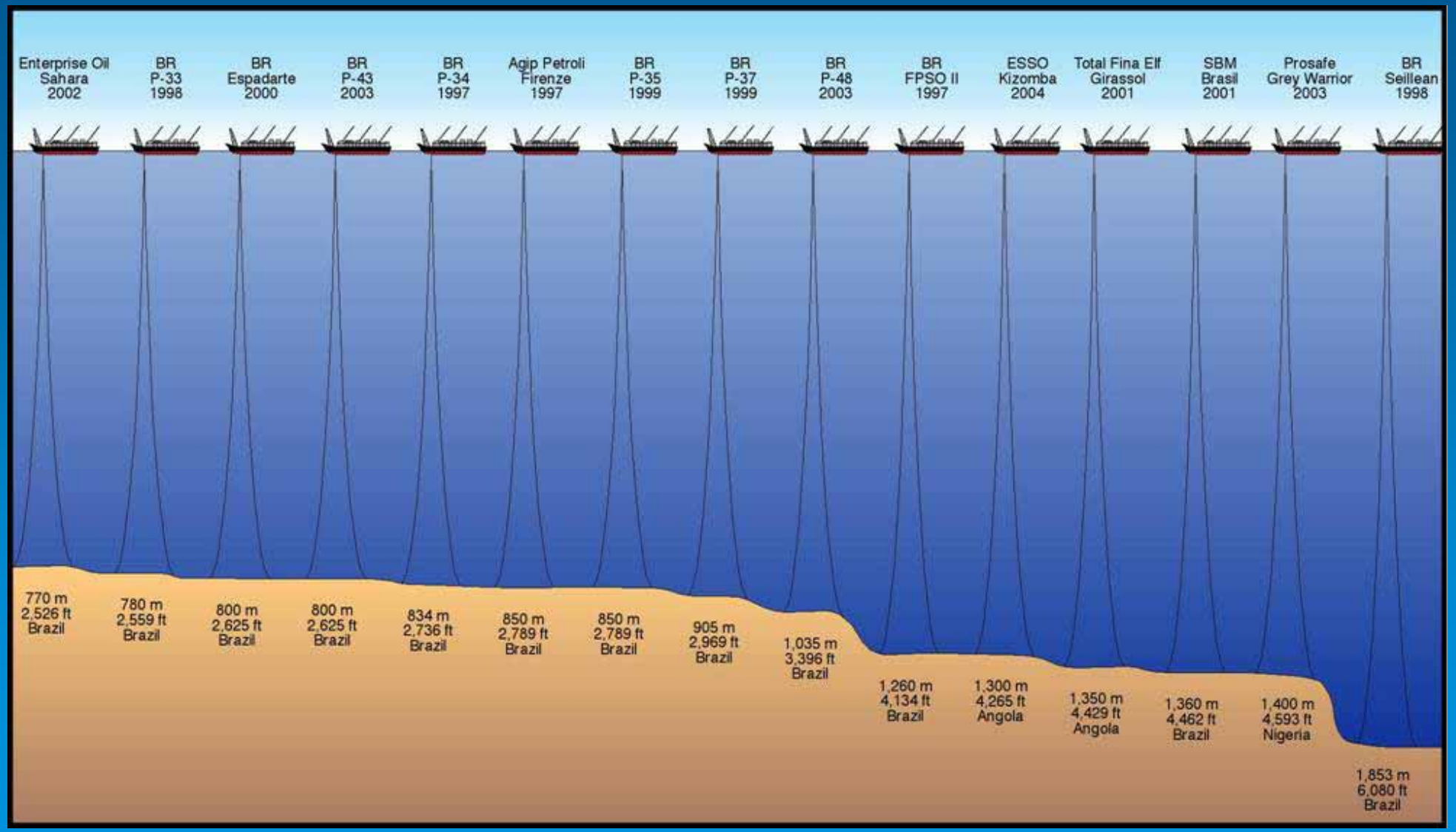
Mad Dog Truss Spar

Horn Mountain Spar



Red Hawk Cell Spar

FPSOs 15 Deepest Units - Installed or Sanctioned



Foinaven FPSO


bluewater

If you know that there are
different kinds
of offshore “oil rigs”. . .

Drilling

- Platform Rigs
- Mobile Offshore Drilling Units
  - Drilling Tenders
  - Jackups
  - Submersibles
  - Semisubmersibles
  - Drillships

Production

- Fixed Platforms
  - Steel Jackets
  - Concrete gravity-based structures
- Floating Production Systems
  - Semisubmersibles
  - Tension-leg Platforms
  - Spar Platforms
  - Ship-Shaped FPSO’s

. . .then you know more than most of the news reporters in the world.

- Since 1947, the offshore industry has moved from the first platform out of sight of land to safely producing in 7,000 feet (2,100 meters) of water and safely drilling in 10,000 feet (3,050 meters) of water.

- The industry is still learning, and there is more to come…

Thank You