

Gulf of Mexico Update **to** **OCS Policy Committee**

May 24, 2001

Chris Oynes
Regional Director
Minerals Management Service

Preview

- **Activity levels**
- **Shallow water trends**
- **Deepwater development**
- **Production projection**
- **FPSO's**
- **Sale 181**

Gulf of Mexico OCS Activity

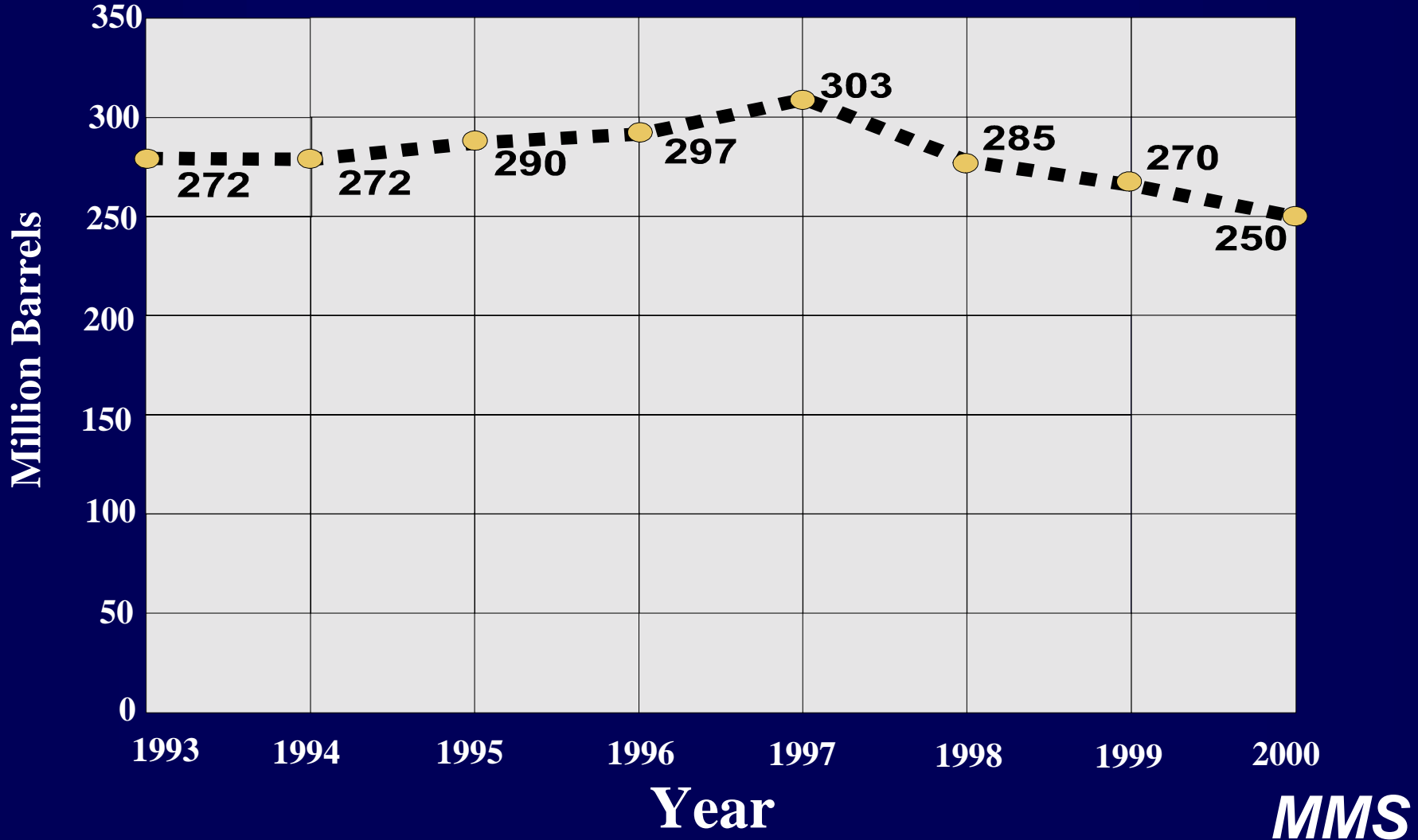
- **Producing: 2,946 oil wells;
3,048 gas wells**
- **125+ discoveries in Water Depths
> 1,000 ft**
- **11 discoveries beyond 6,000 ft
Water Depth**
- **4,000 active platforms**

Gulf of Mexico Activity

- **Near record Rig count – 205 working**
- **Record in deepwater – 43 a week ago**
- **225 deepwater wells last year**
(exploration and development)
- **New fabrication yard**
- **1,364 wells last year**

Shallow Water Trends

GOM Shallow Water Oil Production



GOM Shallow Water Gas Production



Why Focus on Deep Gas

- **Focus is sediments deeper than 15,000 ft. in >200m water**
- **Largely undrilled**
- **Probably has substantial resources (5 - 20 Tcf)**
- **Shallow water gas production is declining**
- **Has potentially high flow rate wells that can offset declining gas production (20 -80 MMcf/d)**
- **Takes advantage of existing infrastructure - producing facilities and pipelines**

Why an Incentive

- **Much higher costs to drill deeper wells**
- **Wells would have to deal with high pressure, high temperature, and corrosives (CO₂ and H₂S)**
- **Will require specially designed jack-up rigs**

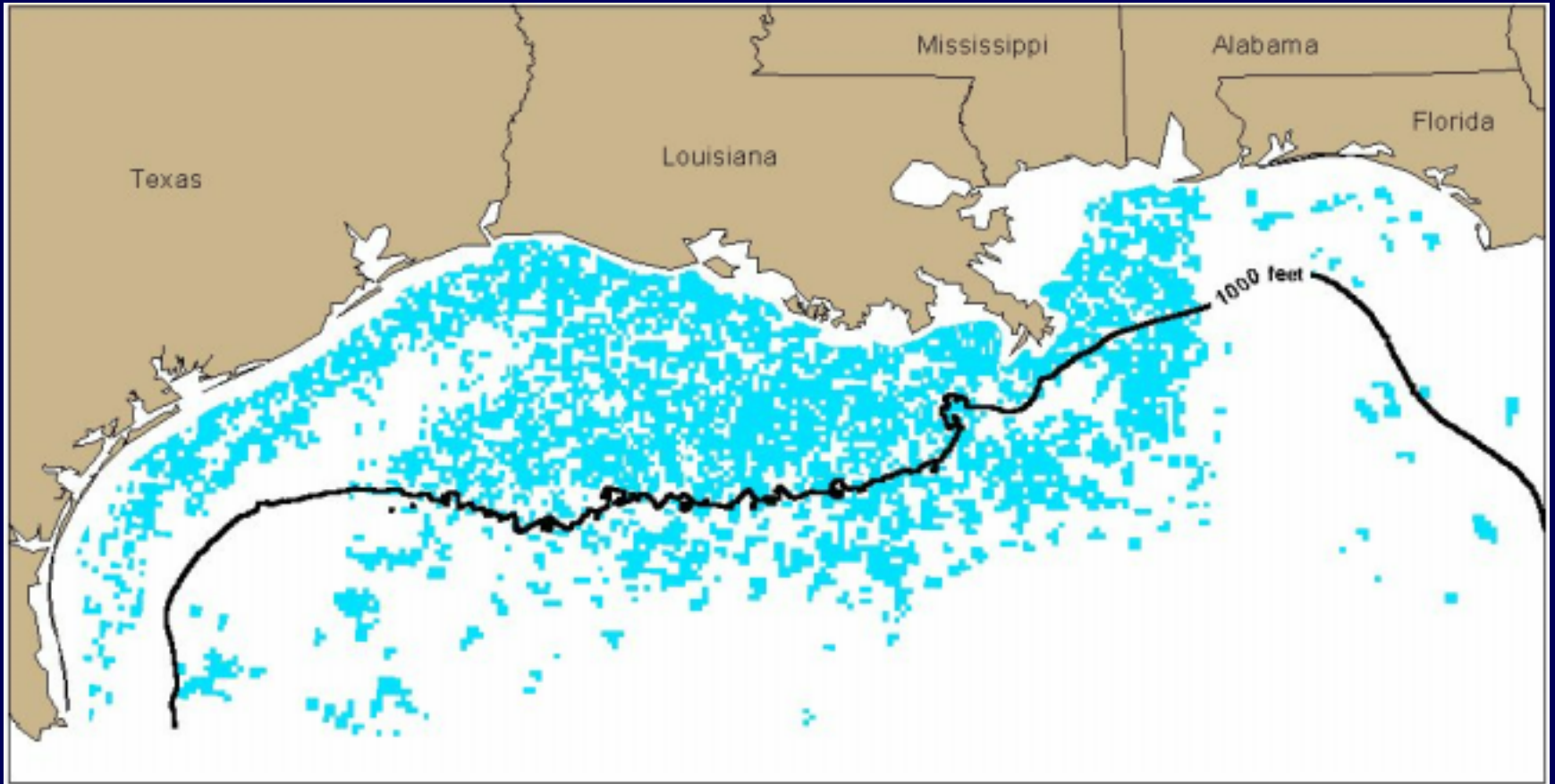
Deep Gas Incentives in Shallow Water

- **In Sale 178 (March 2001), MMS used a deep gas incentive for new leases**
- **Drill a new well greater than 15,000 feet receive first 20 BCF royalty free**
- **Proposed also for Western Sale 180 - new leases**
- **Looking at deep gas incentives for existing leases**
- **New publication - *Promise of Deep Gas***

Gulf Deepwater Development

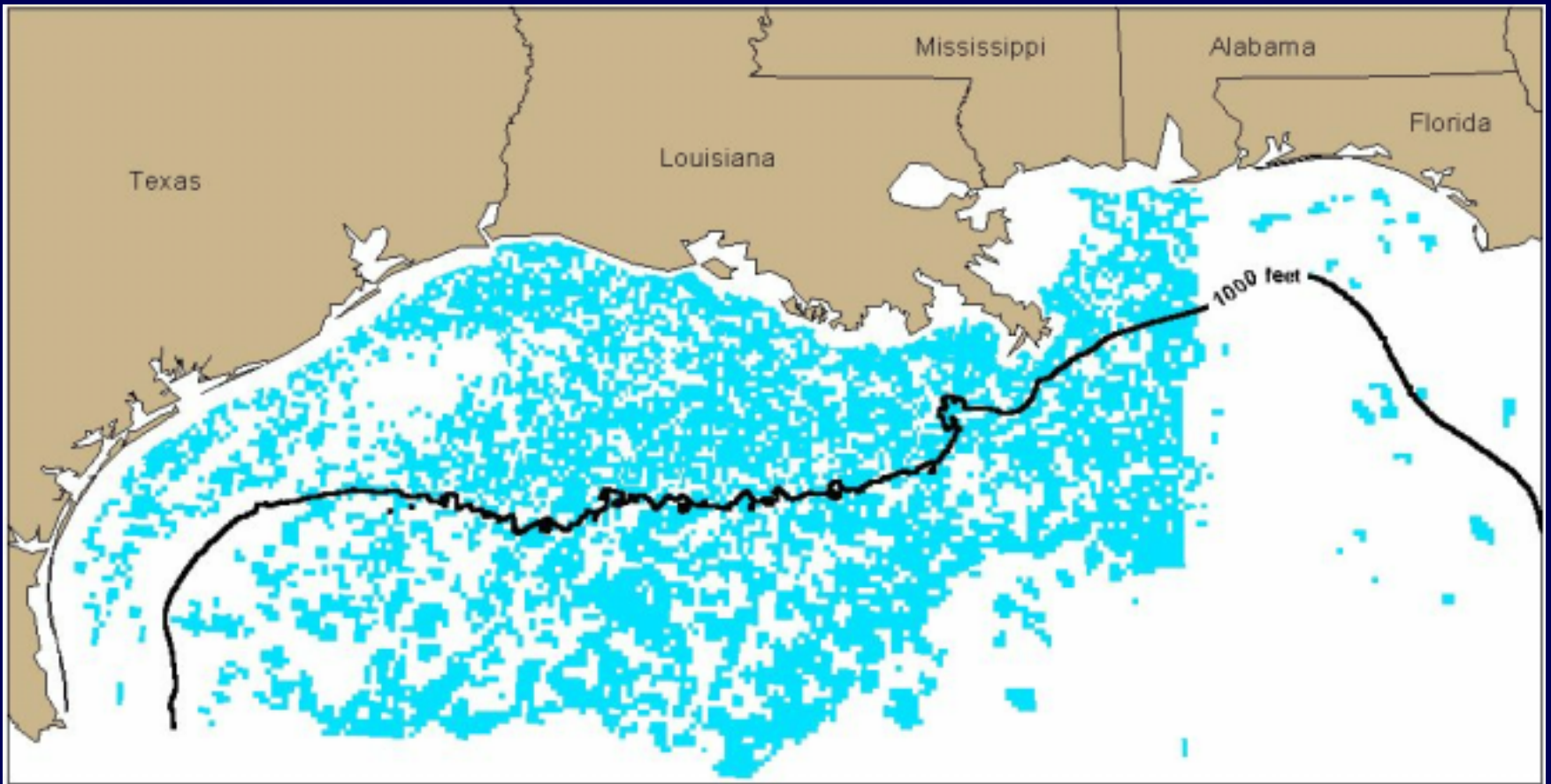
GOM Active Leases

(as of December 1, 1995)



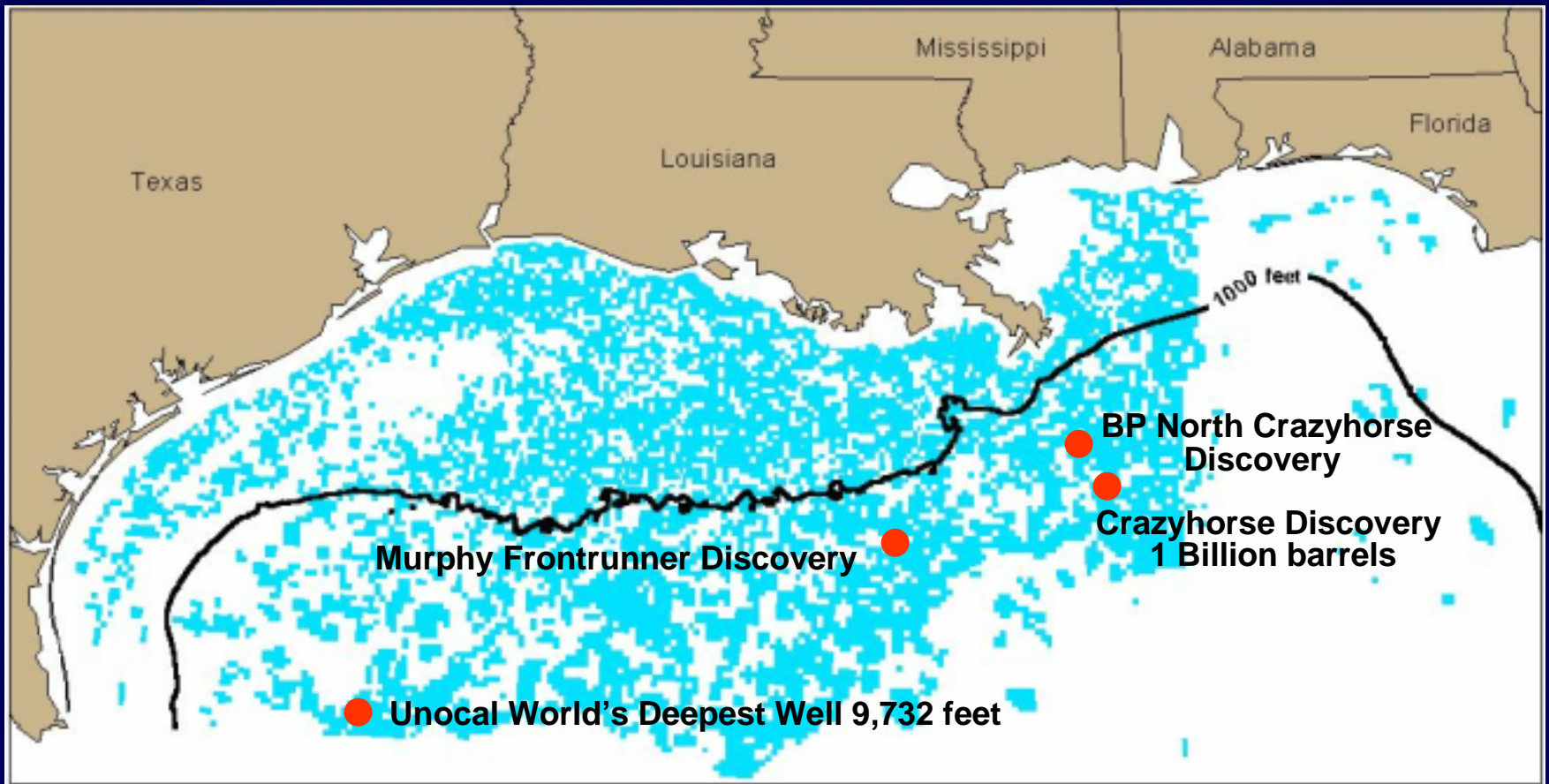
GOM Active Leases

(as of March 1, 2001)

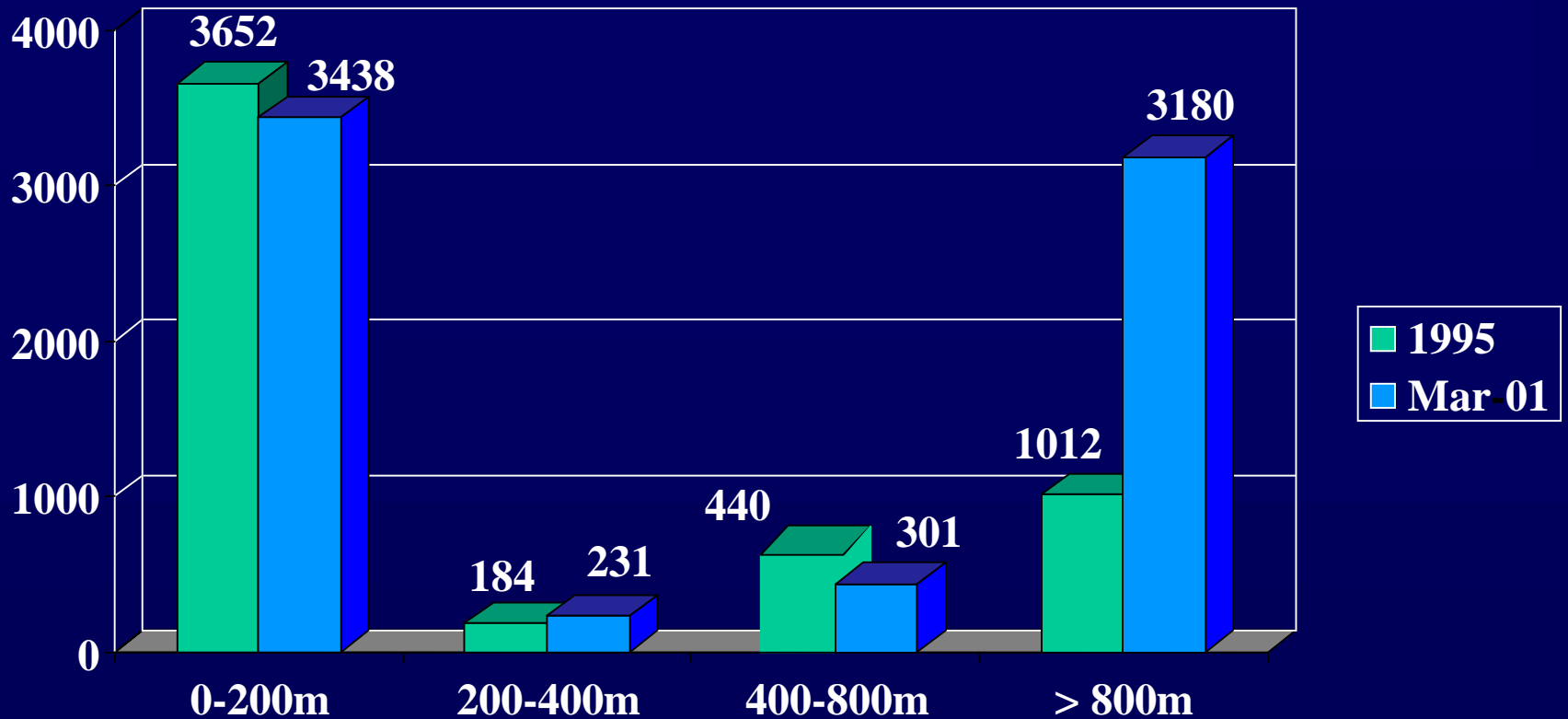


GOM Recent Activity

(as of March 1, 2001)



Expanded Deepwater Leasing



Deepwater

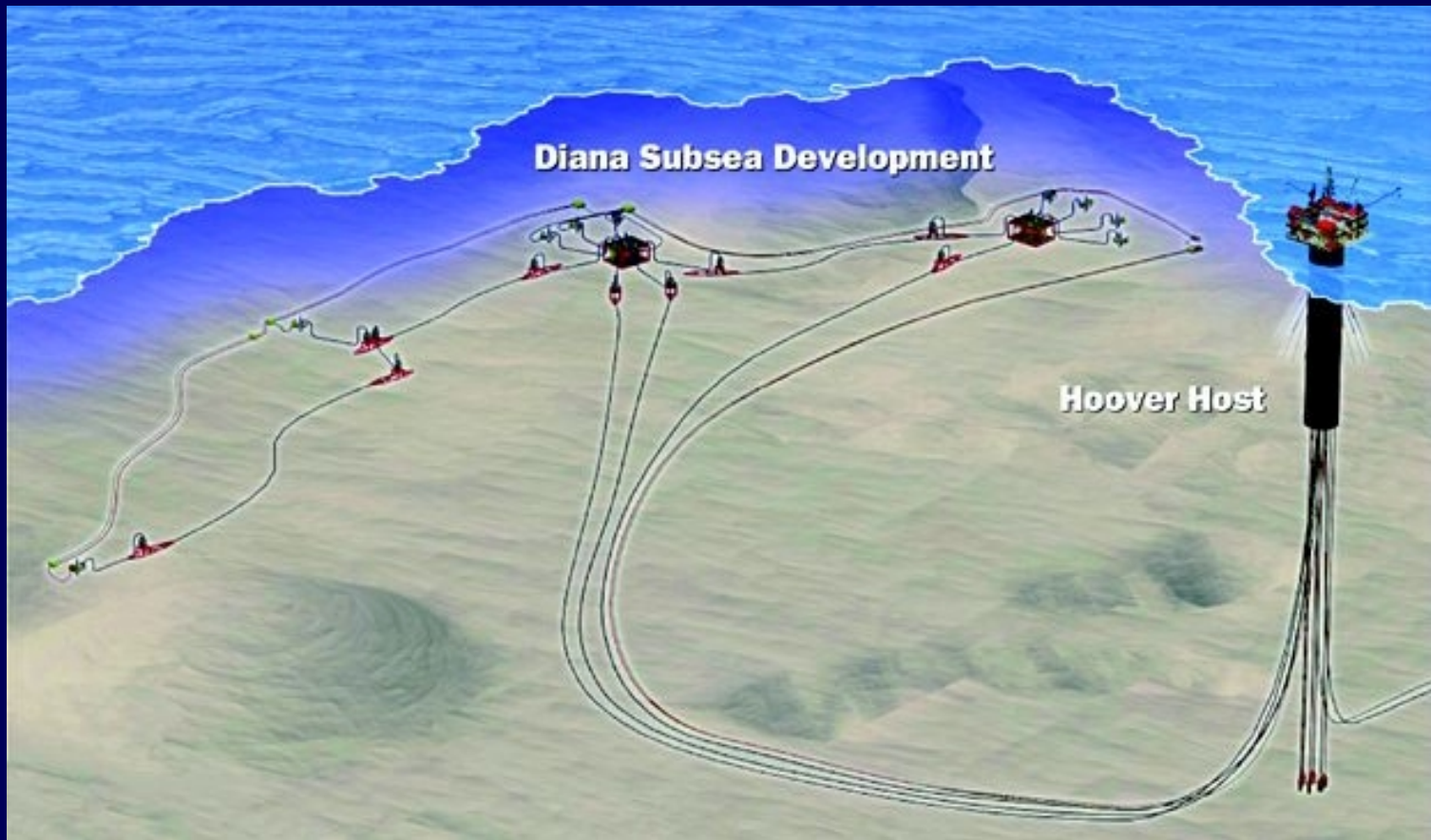
- **Deepwater development has accelerated rapidly**
- **11 projects in production in 1995**
- **37 projects in production in early 2001**
- **Technology of production systems has evolved rapidly**

Tension Leg Platform - Mars

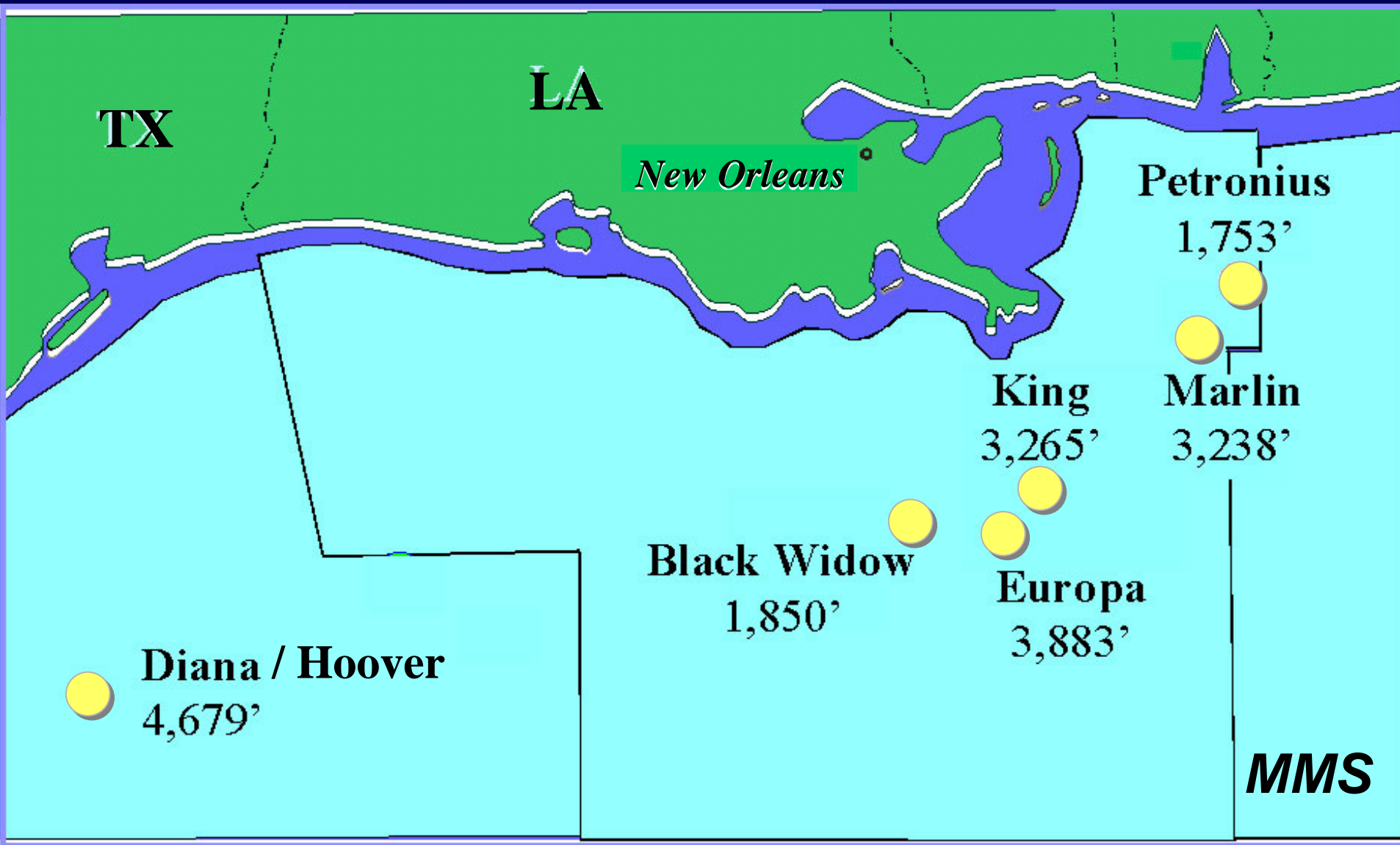


MMS

Spar - Diana Hoover

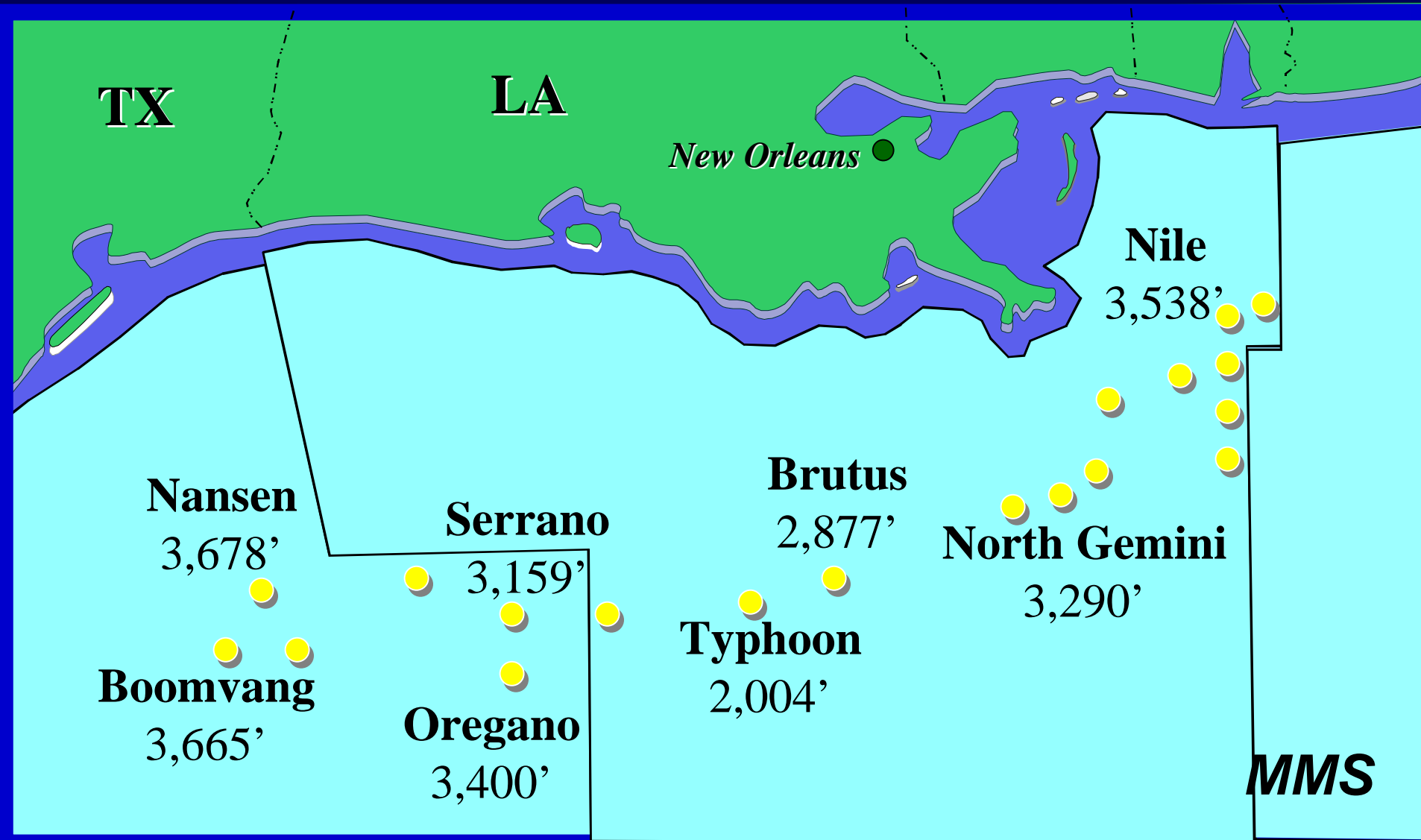


Deepwater Startups 2000

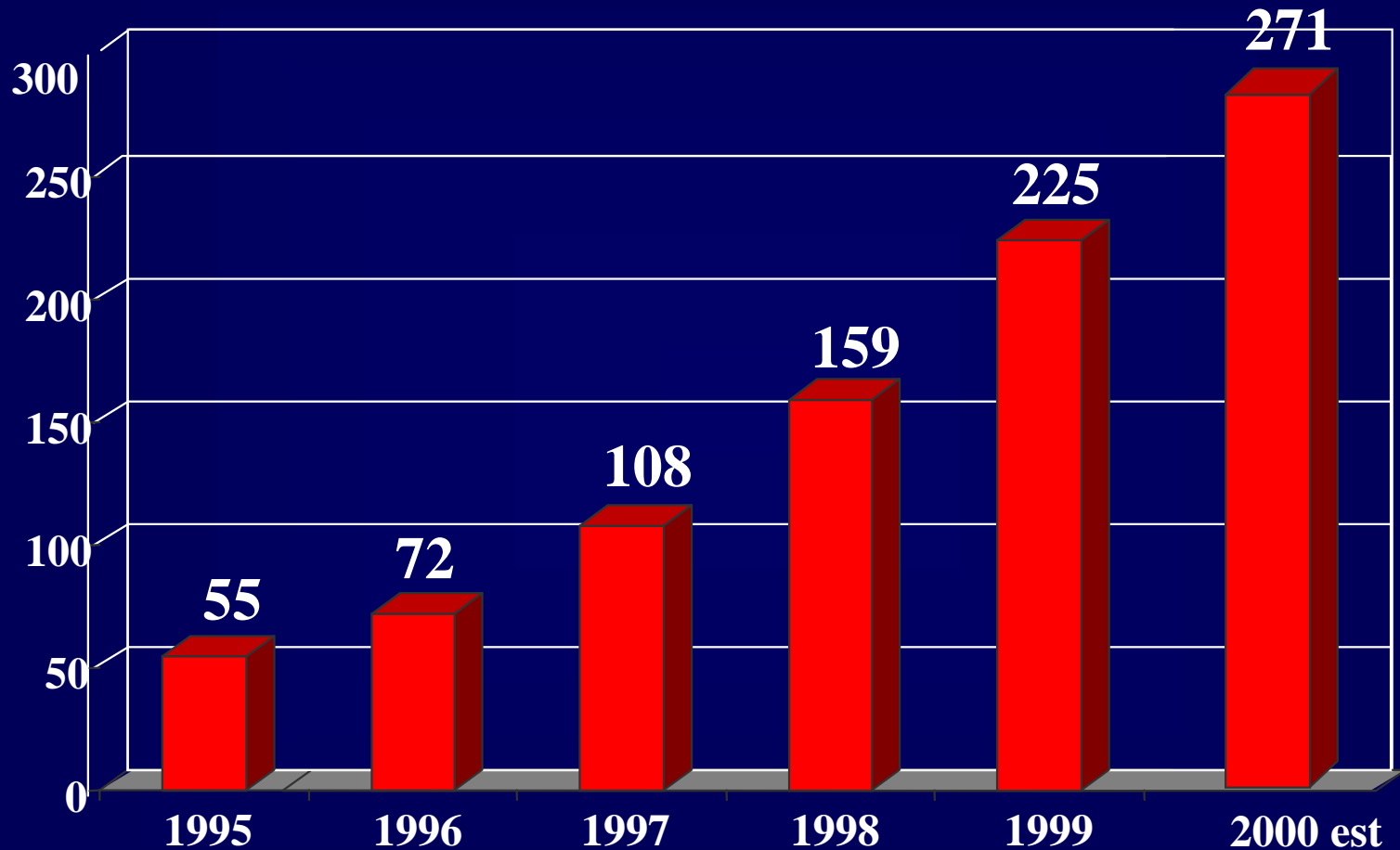


Deepwater Startups 2001-02

(expected)



Gulf of Mexico Deepwater Oil Production

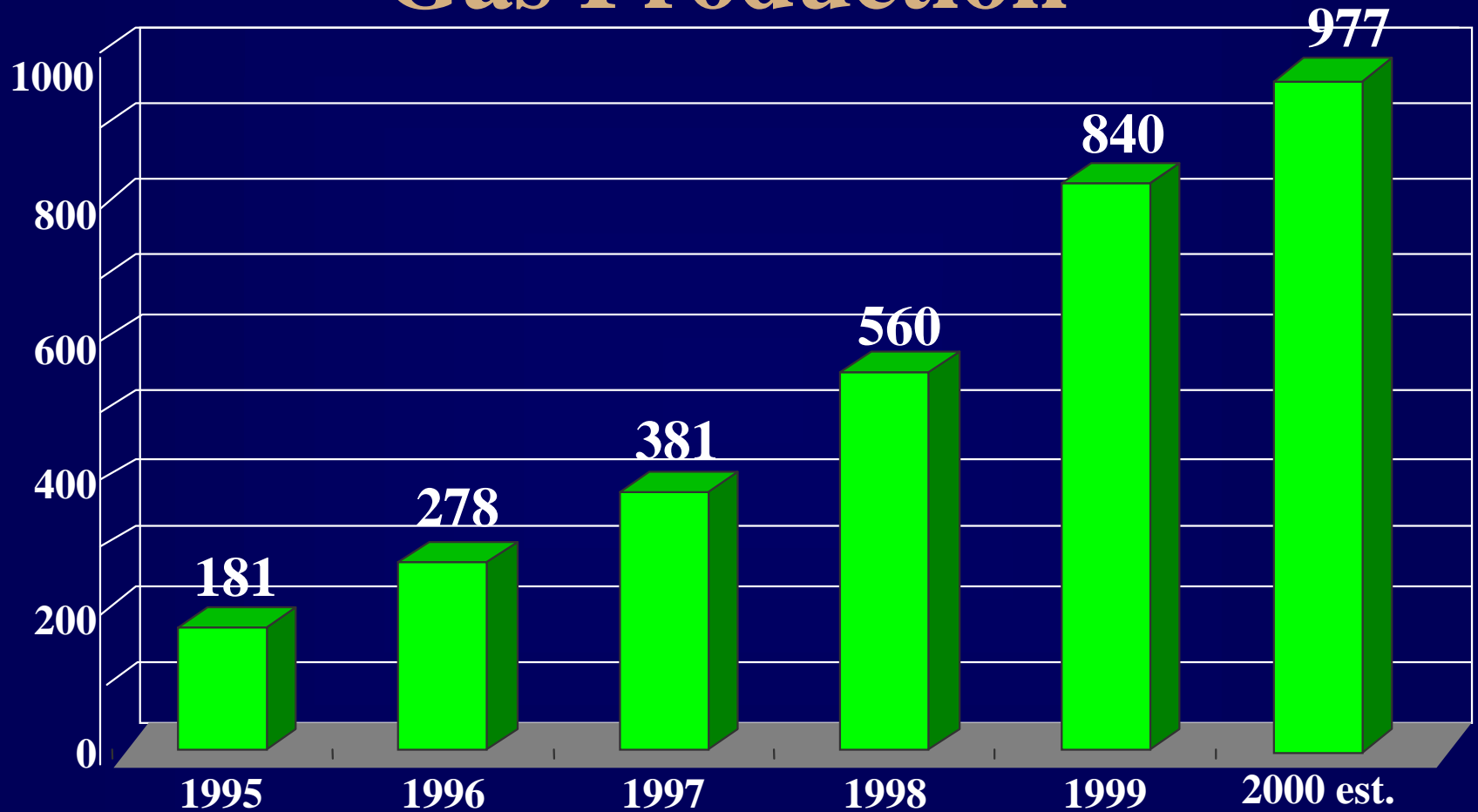


■ Millions of Barrels Per Year

Deepwater = 1000 ft. +

MMS

Gulf of Mexico Deepwater Gas Production

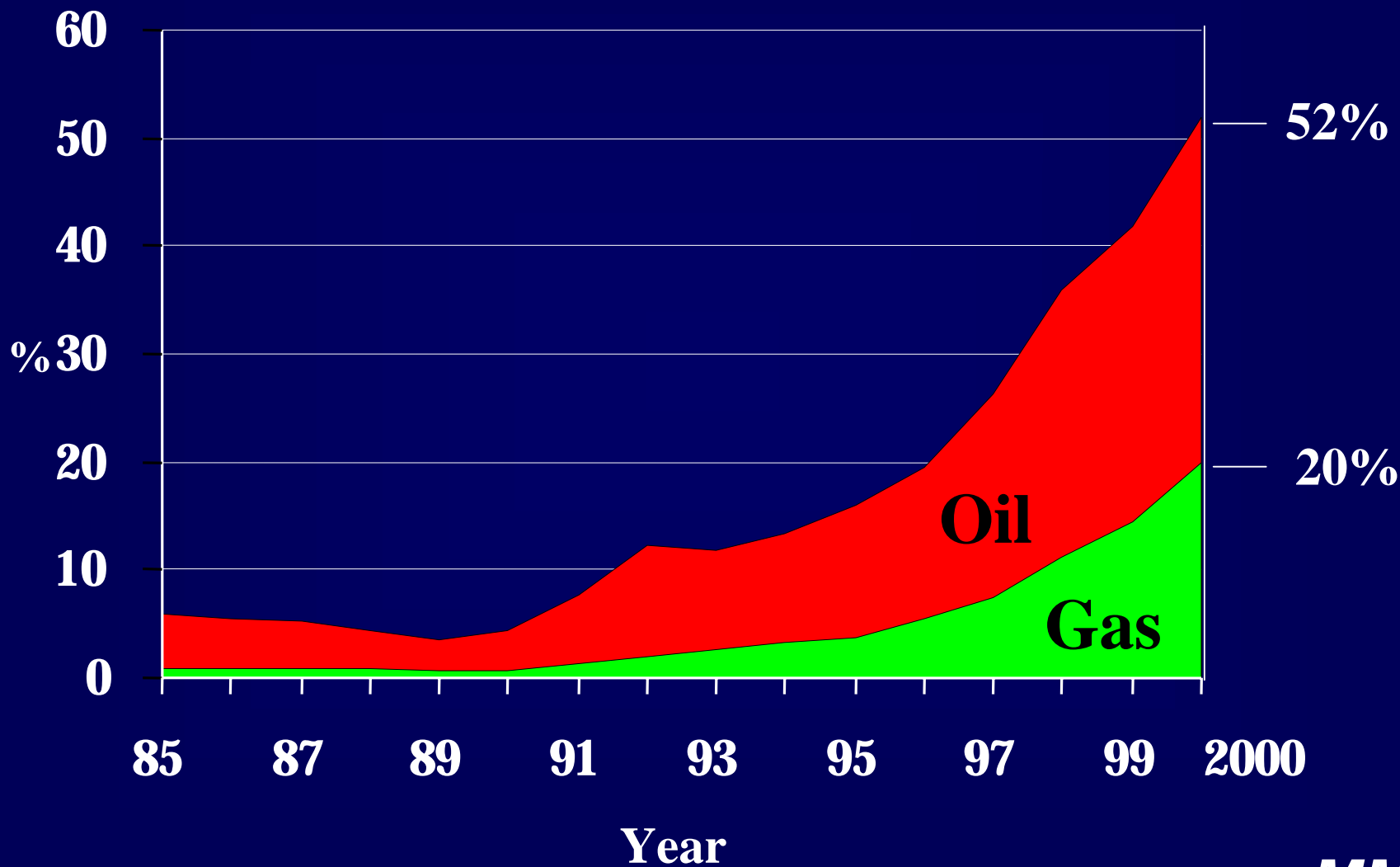


■ Billions of Cubic Feet (BCF) Per Year

MMS

GOM OCS Deepwater Production

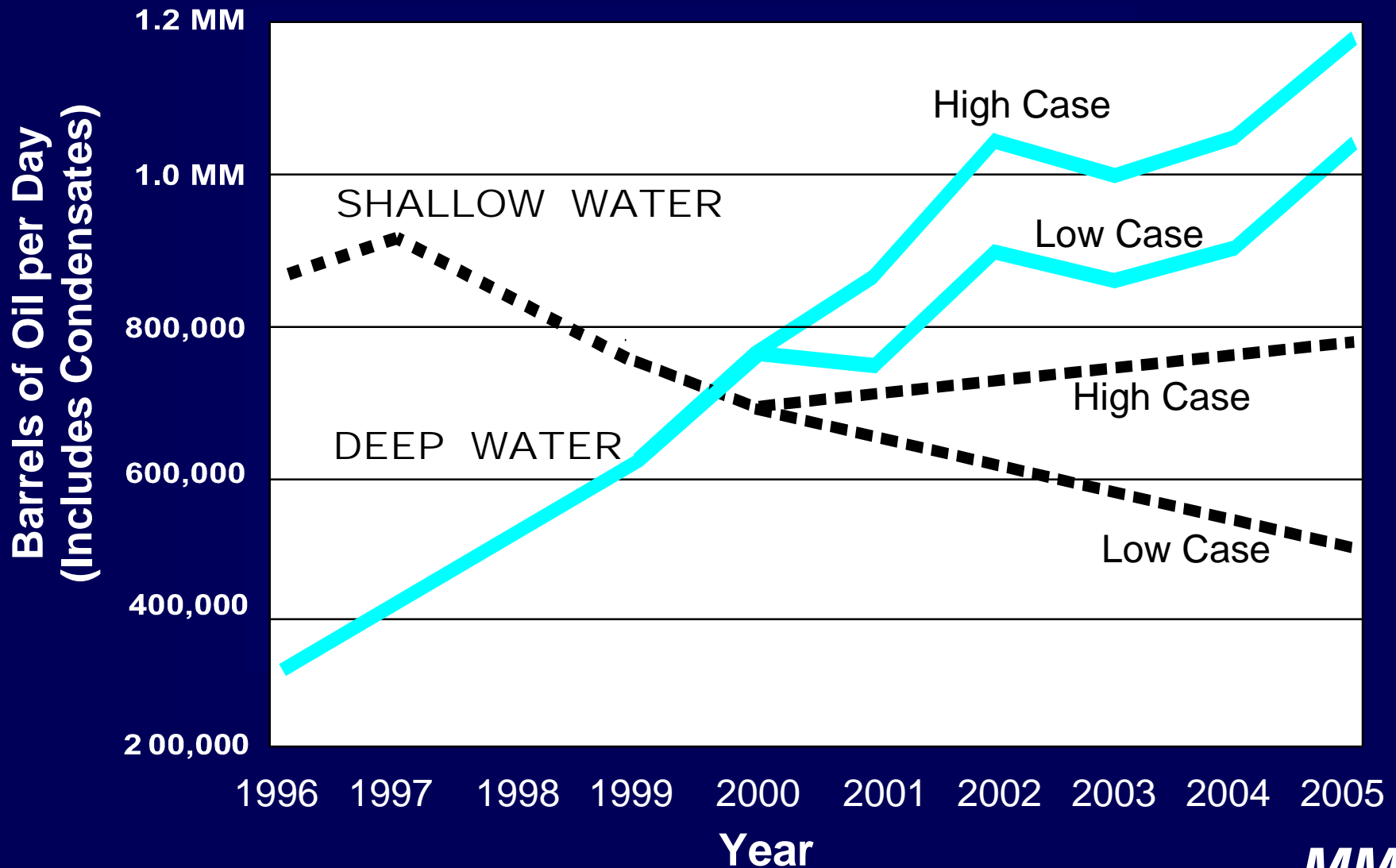
(% of total Gulf of Mexico)



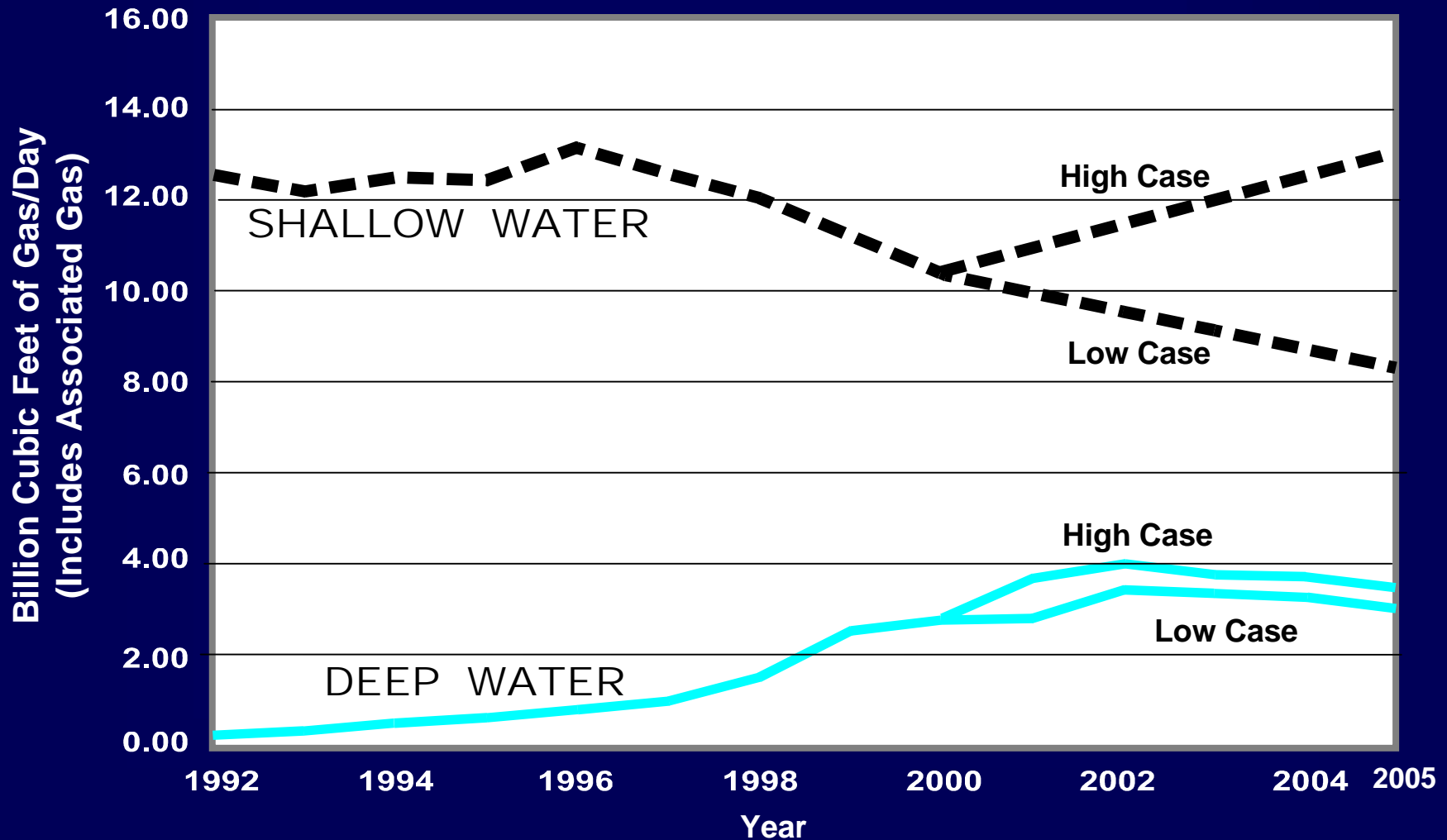
Production Projection

GOM Projection Oil Production

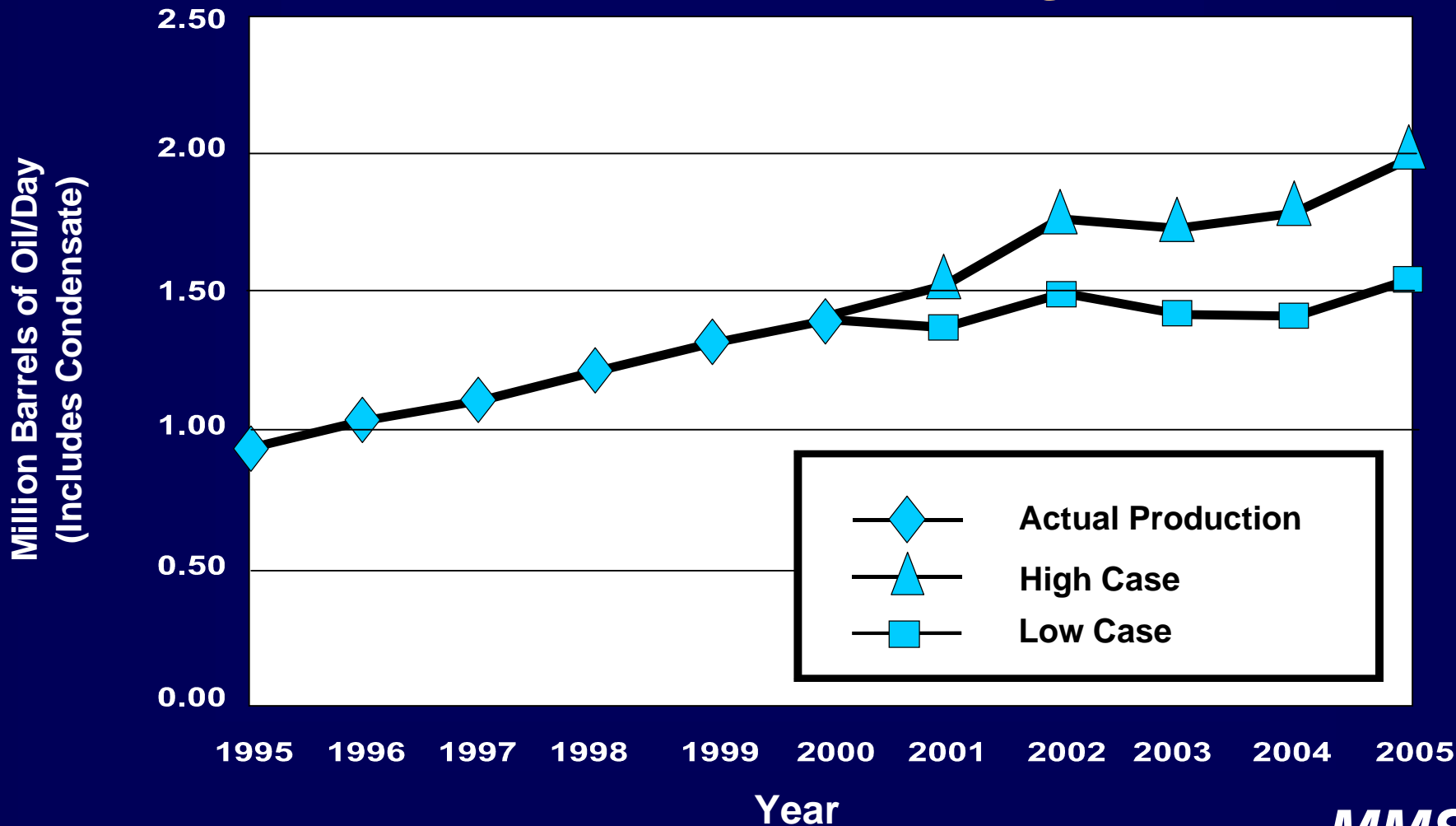
(from MMS Report 2001-044)



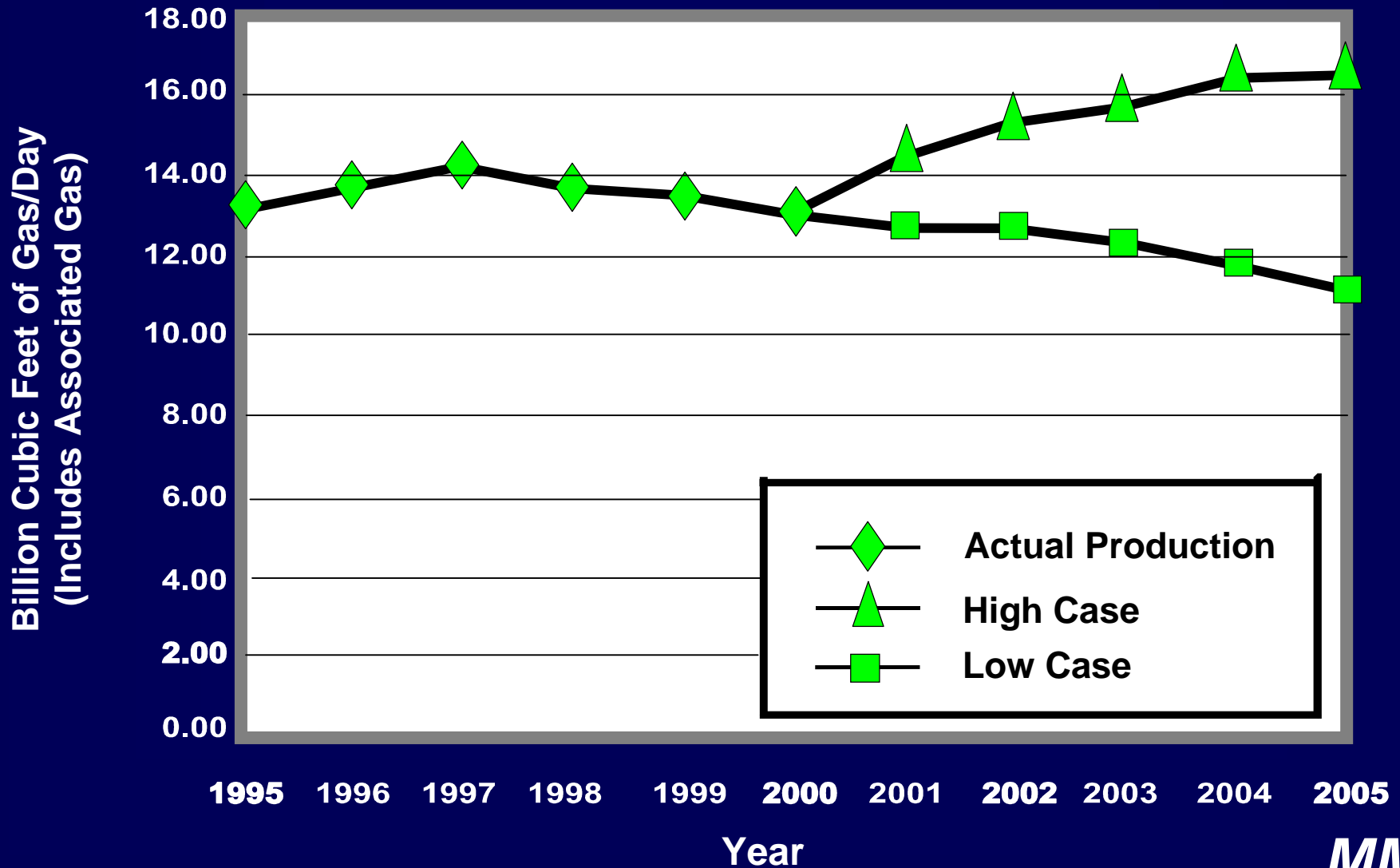
GOM Gas Production Projection



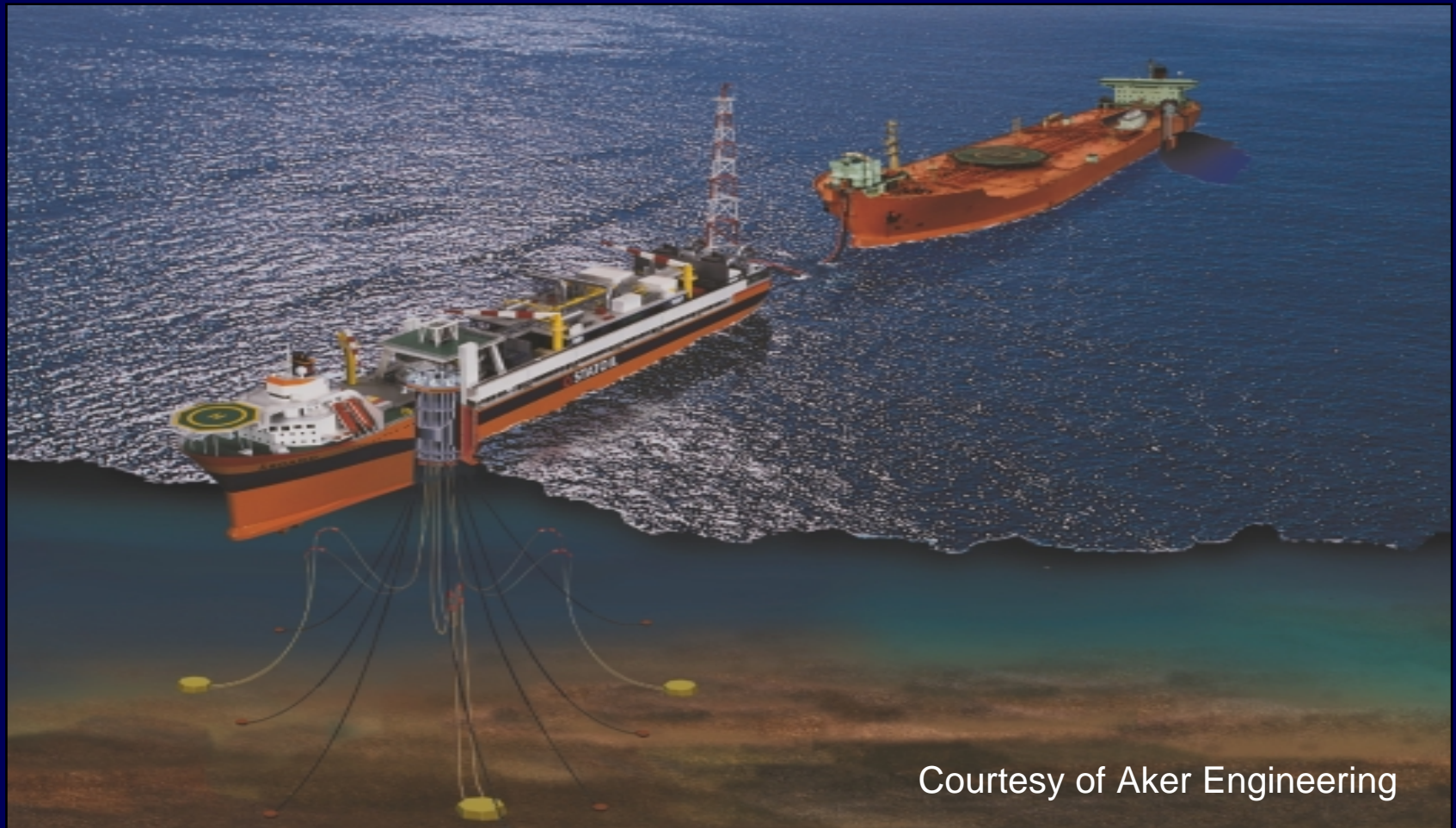
Combined Oil Production Gulf of Mexico Projection



Combined Gas Production Gulf of Mexico Projection



Floating Production, Storage, and Offloading System



Courtesy of Aker Engineering

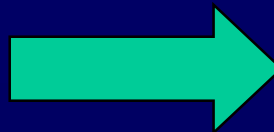
FPSO's

- **Final EIS released**
- **Evaluated a permanently moored, double hull FPSO that can store 1 million barrels of oil**
- **Decision pending**

Existing Framework

What Happens After the EIS

Application Filed
Within the Bounds
Investigated in EIS



Prepare a Site-
Specific EA

Engineering and Safety Review

A large blue arrow pointing from the left side of the slide towards the right, positioned below the top two text blocks and above the bottom two text blocks.

Application Filed
Outside the Bounds
Investigated in EIS



Prepare another
EIS? May do an
EA first?

Eastern Gulf of Mexico Proposed Sale 181



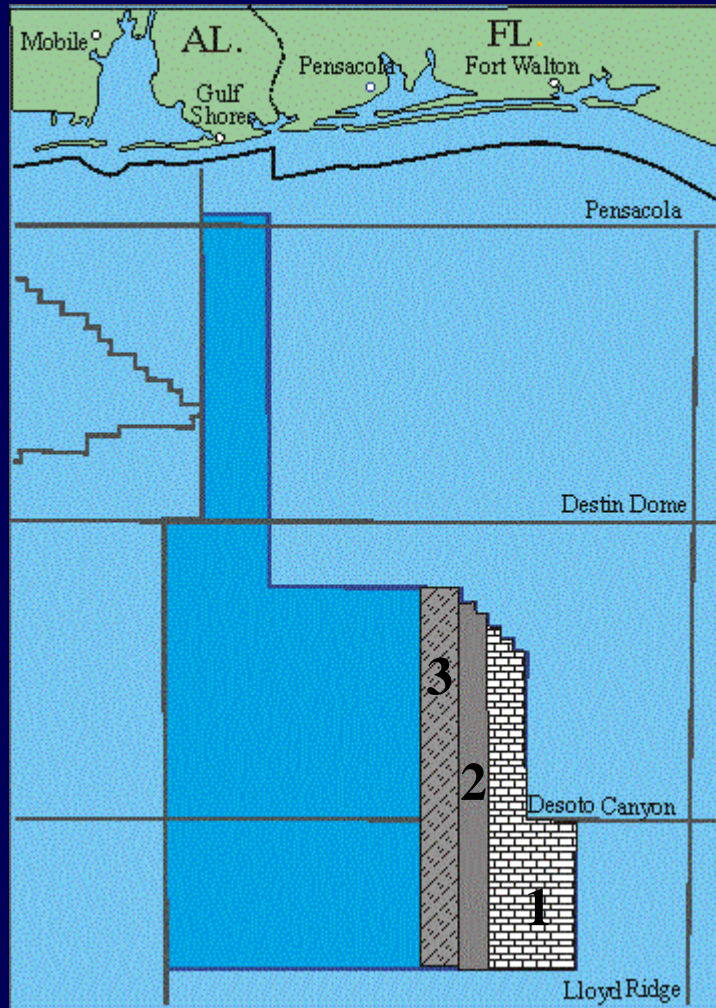
Sale 181

- **Sale 181 is part of the current approved 5-Year leasing program**
- **Sale 181 is not restricted by Congressional moratoria**
- **Started the sale process in January 1999**
- **5.9 million acres involved (1,033 blocks)**
- **MMS estimates there could be as much as 240 million barrels of oil and 1.8 Tcf of gas in the sale**

Sale 181

- **DEIS released and public hearing held**
- **Sale scheduled for December 2001**
- **Next step is a Proposed Notice of Sale
in July 2001**

Sale 181 - Military Concerns



Potential Alternatives Military Requests

1. Alternative B - 126
Block Deferral
2. Stipulation - Require
Below Seabed Operations
3. Stipulation - No
Permanent Surface
Structures & Windows

Sale 181 - Potential Stipulations

