**THUNDER HORSE**

**Platform design:** semi-submersible

**Dimension:** (ft) 455′ x 344′

**Topsides:** 20,000 tonnes

**Hull:** 60,000 tonnes

**Block:** Mississippi Canyon 778/822

**Platform production rating:** 250,000 barrels of oil per day;
200 million cubic feet of gas per day

**Drilling rig**

**229 bed hotel**

**100 MW power plant**

**Platform location:** Approx: 150 miles SE of New Orleans

**Operating water depth:** 6050 feet

**Other facts:**

- Thunder Horse is the world’s largest, semi submersible, production and drilling facility
- Facility capacity is 250 MBOPD and 200 MMSCFD
- Water Injection Capacity is 300,00 mbd at 6300 psi
- Thunder Horse’s overall height is 425 feet from crown on the derrick to hull keel
Thunder Horse

Endymion Oil Pipeline
Capacity: ~420 mbpd
Diameter: 30 inches
Length: 90 miles

Proteus Oil Pipeline
Capacity: ~420 mbpd
Diameter: 28 inches
Length: 70 miles
Southern Green Canyon (SGC)

**ATLANTIS**
- **Start Date:** 2007
- **Platform Design:** Semi-submersible
- **Block:** Green Canyon 699
- **Platform Production Rating:** 200,000 barrels of oil per day
  180 million cubic feet of gas per day

**HOLSTEIN**
- **Start Date:** 2004
- **Platform Design:** Truss Spar
- **Block:** Green Canyon 645
- **Platform Production Rating:** 110,000 barrels of oil per day
  150 million cubic feet of gas per day

**MAD DOG**
- **Start Date:** 2003
- **Platform Design:** Spar
- **Block:** Green Canyon 782
- **Platform Production Rating:** 100,000 barrels of oil per day
  60 million cubic feet of gas per day
Southern Green Canyon (SGC) - Atlantis

Other facts:
- Located in 4,500 to 6,800 feet of water in Southern Green Canyon Block 787 in the GOM
- Jointly owned by BP (56% interest and operator), and BHP-Billiton with 44%
- Nameplate facility throughput is 200 mboed, and up to 180 mmscf/
- Mobile Drilling Unit (MODU) allows BP to re-enter wells as needed and provides flexibility in choosing well locations
- Atlantis is one of the deepest moored semi-submersible platform in the world
- Production capacity is estimated at 200,000 barrels of oil per day and 180 million cubic
feet of gas
Southern Green Canyon (SGC) - Holstein

**Other facts:**
- The 6 well pre-drilling program in 2002 culminated in a new “Best in Class” benchmark of 12.6 days/10K
- First use of a Spar supported Riser Tensioner system
- Combined offshore topsides lifts (22,000 t) in the GOM
- Power Generation plant (60 MW installed) in the GOM
- At the time was one of the largest Offshore Hook-Up and Commissioning program in the GOM
- Platform at the time was one of the largest production, drilling and quarters (PDQ) truss spar in the world
- Mooring system extends three-quarters of a mile from the surface to the ocean floor
- Spar is 745 feet long and 150 feet in diameter
- Truss is 430 feet long and weighs around 6,600 tons
Southern Green Canyon (SGC) – Mad Dog

**Other Facts:**

- Located beneath 4,500 feet of water some 190 miles south of New Orleans
- Second of four gigantic fields discovered by BP in late 1990s
- One of the top 10 largest discoveries to-date in the GOM
- First polyester rope mooring system approved by the U.S. Coast Guard for use on a permanent installation
- Single-piece truss spar was fabricated for the platform
- At 8,000-tons, the topsides deck was the largest single-hook load lift in the GOM
- The capacity to produce up to 100,000 barrels of oil and 60 million cubic feet of natural gas per day
- 150 drilling and production personnel operate the truss spar – designed to produce and drill at least 12 wells simultaneously
### WHOLE CRUDE INSPECTIONS

<table>
<thead>
<tr>
<th></th>
<th>Thunder Horse</th>
<th>HLS</th>
<th>LLS</th>
<th>Mars</th>
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### CRUDE DIST. YIELDS, VOLUME %

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<th>JET FUEL</th>
<th>Diesel</th>
<th>FCU FEED</th>
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### REFORMER FEED

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### JET "A" FUEL DIST.

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### FURNACE OIL DIST.

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### FCU FEED

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<td>2.2</td>
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<td>NITROGEN, PPM</td>
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<td>568</td>
<td>1010</td>
<td>875</td>
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### REDUCED CRUDE

|                        | SULFUR, WT% | 1.6  | 1.1  | 1.4  | 4.0  | 4.5  | 4.7  |
| RAMS CARBON, WT%       | 18.0         | 12.8 | 12.2 | 17.3 | 19.5 | 22.3 |      |
| NICKEL, PPM            | 62           | 23   | 31   | 74   | 70   | 105  |      |
| VANADIUM, PPM          | 46           | 18   | 29   | 173  | 223  | 399  |      |

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