Who was Involved?

• British Petroleum (BP) owns the well, known as the Macondo Prospect, in the Gulf of Mexico

• Transocean owned and operated the Deepwater Horizon drilling rig

• Halliburton was responsible for the installation and cementing of the well
What Happened?

• On April 20, the Deepwater Horizon drilling rig exploded, killing 11, then sank
  – Methane bubbled up from the well
  – Instead of being diverted overboard, the gas was vented onto the rig
  – The gas was collected by the HVAC system and sent to the generator rooms, where it was ignited
What Happened?

• On April 22, it was determined that oil was leaking into the Gulf of Mexico
• Several attempts to kill the well were made
• Spill continued until a cap was applied on July 15
• Macondo Prospect well declared dead on September 19 after relief wells finally reached the main well and was plugged with cement
How Much Oil?

• 1 Barrel=55 Gallons
• Estimates varied wildly over the course of the disaster
• Started at 1000 barrels per day on April 24
• Official estimate released on Aug 2 stated peak of 62000 barrels per day
Graphic of Oil Slick

• (External Website)
• http://www.nytimes.com/interactive/2010/05/01
Some Total Numbers

• The total amount spilled was approximately 4.9 million barrels of oil
• Of this, BP was able to recover approximately 800000 barrels using containment ships
• In total, about 75% of the oil from the spill was left in the Gulf
Likely Cause of the Oil Spill

A massive structure called a blowout preventer had been placed at the wellhead.

Reports indicate that a piece called the blind shear ram did not deploy fully.
Wildlife

• The total effects of the oil spill will probably not be known for years, if not months

• Thousands of dead animals, including birds and turtles, showed up on beaches and in the gulf with no visible oil on them, in much higher numbers than previous years
Dispersants

• During the spill, chemical dispersants were applied to the oil coming out at the bottom of the Gulf and on the surface

• Assume microbes and bacteria will take care of the oil naturally

• This may take months or even years for the oil to break down
Dispersants

• The main dispersant used by BP during the cleanup efforts is called Corexit
• This is considered by most nations to be very toxic
  – Technically banned from use in the UK
• BP says it was used because it was available
• Critics say it was used because of ties between BP and the manufacturer of Corexit
Fish Kill
BP Response

• Three weeks passed before images of oil coming out of the well were released
• Photographers and journalists were denied permission to document the spill and the effects of the spill
“We regretfully admit that something has happened off of the Gulf Coast. More to come.”
“Think about it this way, the ocean is like rootbeer and oil is like ice cream. We just made America a giant rootbeer float!”
“Not only are we dropping a top hat on the oil spill, we're going to throw in a cane and monocle as well. Keeping it classy.”
Who’s Fault?

• In a report issued in early September, BP accepts some blame, but says that Transocean and Halliburton are at fault as well
  – Transocean should have monitored the situation
  – Halliburton used inferior concrete
• Halliburton and Transocean have responded by saying that BP was the one taking too many risks with the drilling
• Some people are pointing the finger at the government over the relaxation of drilling regulations
Conclusions

• This was a huge disaster
• No one wants to take responsibility
• We won’t know the full effects of the spill for months, or even years