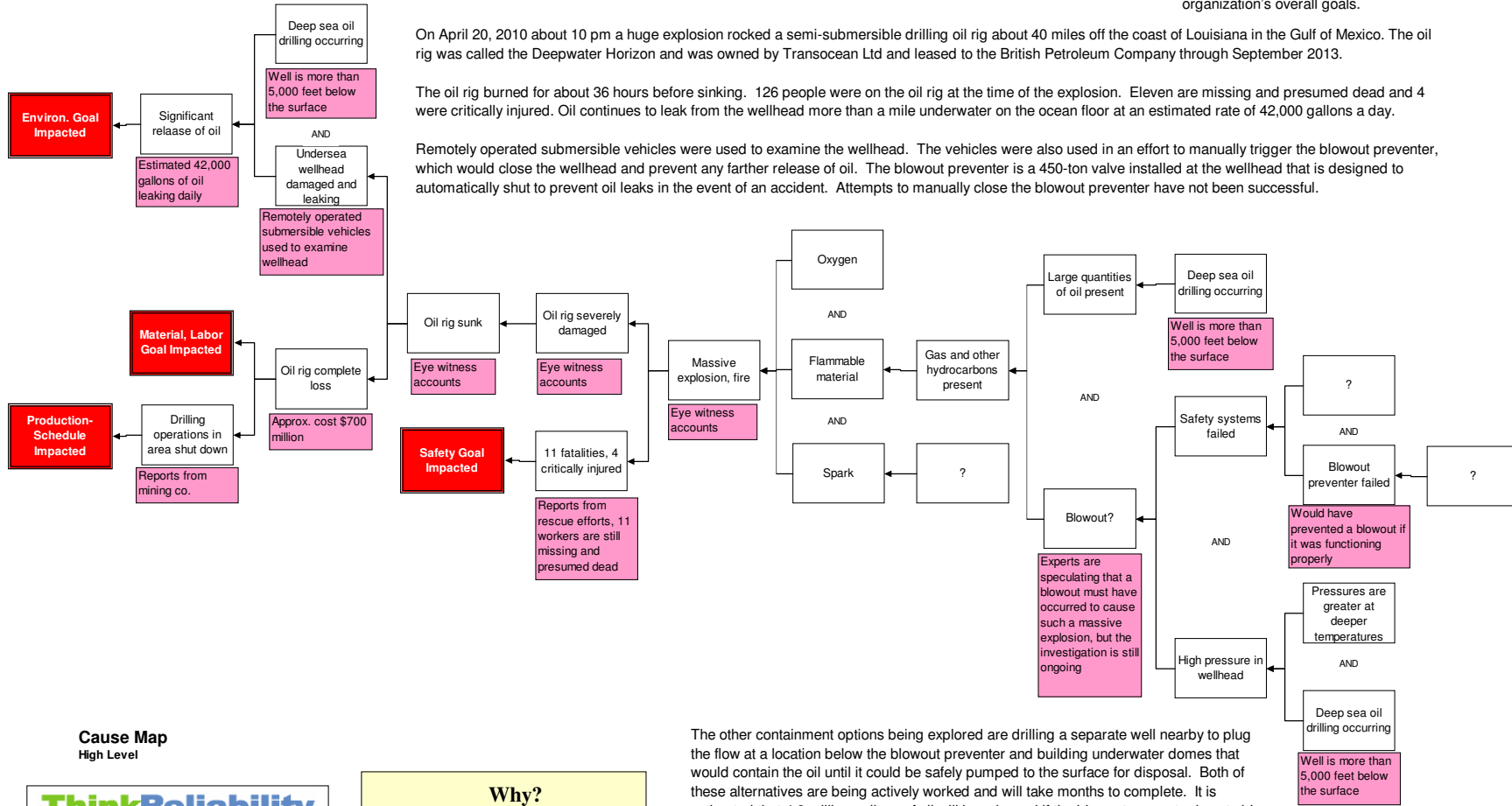


Oil Rig Explosion

Gulf of Mexico
April 20, 2010

A thorough root cause analysis built as a Cause Map can capture all of the causes in a simple, intuitive format that fits on one page.

Even more detail can be added to this Cause Map as the analysis continues. As with any investigation the level of detail in the analysis is based on the impact of the incident on the organization's overall goals.



On April 20, 2010 about 10 pm a huge explosion rocked a semi-submersible drilling oil rig about 40 miles off the coast of Louisiana in the Gulf of Mexico. The oil rig was called the Deepwater Horizon and was owned by Transocean Ltd and leased to the British Petroleum Company through September 2013.

The oil rig burned for about 36 hours before sinking. 126 people were on the oil rig at the time of the explosion. Eleven are missing and presumed dead and 4 were critically injured. Oil continues to leak from the wellhead more than a mile underwater on the ocean floor at an estimated rate of 42,000 gallons a day.

Remotely operated submersible vehicles were used to examine the wellhead. The vehicles were also used in an effort to manually trigger the blowout preventer, which would close the wellhead and prevent any farther release of oil. The blowout preventer is a 450-ton valve installed at the wellhead that is designed to automatically shut to prevent oil leaks in the event of an accident. Attempts to manually close the blowout preventer have not been successful.

The other containment options being explored are drilling a separate well nearby to plug the flow at a location below the blowout preventer and building underwater domes that would contain the oil until it could be safely pumped to the surface for disposal. Both of these alternatives are being actively worked and will take months to complete. It is estimated that 4.2 million gallons of oil will be released if the blowout preventer is not able to be closed.

The cause of the explosion is unknown at this time. An investigation is underway by the Coast Guard and the Minerals Management Service.

Cause Map High Level



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