[0009a] According to a first aspect of the present invention, there is provided a marine well containment system capable of producing fluids from a marine oil and gas well comprising: a blowout preventer; a subsea containment assembly connected on top of the blowout preventer and located in substantially close proximity to the seabed; a riser assembly, wherein the riser assembly further comprises a vertical pipe riser and a flexible riser and wherein the riser assembly is connected to the subsea containment assembly; a capture vessel connected to the riser assembly; wherein the capture vessel is capable of receiving fluids produced by the blowout preventer, captured by the subsea containment assembly, piped through the riser assembly to the capture vessel or a combination thereof.

[0009b] According to a second aspect of the present invention, there is provided a marine well containment system capable of producing fluids from a marine oil and gas well comprising: a capture caisson; a blowout preventer capable of producing fluids wherein the blowout preventer is enclosed in the capture caisson; a subsea containment assembly installed on top of the blowout preventer wherein the subsea containment is exterior to the capture caisson and located in substantially close proximity to the seabed; a self-standing riser assembly, wherein the riser assembly further comprises a seabed foundation, a vertical pipe riser and a flexible riser and wherein the riser assembly is connected to the subsea containment assembly; a capture vessel connected to the riser assembly; wherein the capture vessel is capable of receiving fluids produced by the blowout preventer, captured by the capture caisson, captured by the subsea containment assembly, piped through the riser assembly to the capture vessel or a combination thereof.

[0009c] According to a third aspect of the present invention, there is provided a marine well containment system capable of producing fluids from a marine oil and gas well comprising: a capture caisson; a subsea containment assembly installed on top of the capture caisson and located in substantially close proximity to the seabed; a self-standing riser assembly, wherein the riser assembly further comprises a seabed foundation, a vertical pipe riser and a flexible riser and wherein the riser assembly is connected to the subsea containment assembly; a capture vessel connected to the riser assembly; wherein the capture vessel is capable of receiving fluids produced by the well, captured by the capture caisson, captured by the subsea containment assembly, piped through the riser assembly to the capture vessel or a combination thereof.

[0009d] According to a fourth aspect of the present invention, there is provided a method of controlling a well comprising the steps of: assembling components of a marine containment system wherein the marine containment system includes a subsea containment assembly; installing the subsea containment assembly on top of a blowout preventer connected to the well to be controlled, wherein the subsea containment assembly is located in substantially close proximity to the seabed.

[0010] The system seals the well via either a well connected system or a seabed connected system. The system may provides at least the following advantages:

[0011] minimizes back pressure on a flowing well that may have suspected damage to either the casing string(s), wellhead, or the BOP thereby ensuring that no further damage is sustained to the well until such time as a relief well is completed and effectively 'kills' the well.

[0012] minimizes seawater ingress which reduces the chances of hydrate formation which would block flowlines.

[0013] enhances response capabilities for maximum protection of the environment as well as the safety and health of both the public and personnel.

[0014] utilizes the industry's vast knowledge of offshore equipment and operations.

[0015] allows for the incorporation of new technologies that may be developed in the future.

[0016] A key advantage of embodiments of the present disclosure as compared to current response equipment is that it can be pre-engineered, constructed, tested and ready for rapid deployment. The embodiments disclosed herein may beare more flexible and adaptable and as a result provide the ability to respond to a wider range of potential response situations. Also, the system may beis better equipped to handle weather conditions and other challenges that arise in far offshore, deepwater environments, and the system can be maintained in a state of continuous operational readiness. From a state of continuous operational readiness, mobilization can be carried out rapidly.

[0017] In general, the marine well containment system for producing fluids from a marine oil and gas well comprises a subsea containment assembly. In some embodiments, the marine well containment system further includes a blowout preventer ("BOP"), a riser assembly involving a vertical pipe riser and a flexible riser connected to the subsea containment assembly via flexible jumpers or umbilicals, or both, and a capture vessel connected to the riser assembly,