WHAT IS CLAIMED IS:

1. A method of deploying a riser 10 comprising:

characterized by parking a riser lower portion 26 subsea for a period of time on a riser mount 12 set in the seafloor 14 and spaced proximate to a wellhead 38;

moving the riser lower portion 26 from the parked position to the wellhead 38;

mounting a lower end 22 of the riser lower portion 26 onto the wellhead 38;

completing a full length of the riser 10A;

coupling an upper end of the riser 10A to a facility 52 above sea surface 46; and

accessing the wellhead 38 from above the sea surface 46 through the full length of the riser 10A.

2. The method of claim 1, characterized in that in step (a), the upper end of the riser lower portion 26 is below the draft of a vessel sailing on the sea surface 46.

3. The method of claims 1 or 2, characterized by the riser 10 being parked in step (a) has a length less than a depth of the sea where the riser 10 is parked.

4. The method of claim 3, characterized in that in step (d) comprises further connecting a riser section 48 to the upper end of the riser lower portion 26, the riser section 48 having a length less than a length of the riser lower portion 26.

5. The method of any of claims 1-4, further characterized by emitting a beacon 32 from the riser lower portion 26 of step (a) so that the riser lower portion 26 can be located subsea.

6. The method of any of claims 1-5, characterized in that the riser lower portion 26 is parked on a wellhead 38 located subsea.

7. The method of any of claims 1-6, further characterized by providing a buoyancy module 28 on the riser lower portion 26 for maintaining the riser lower portion 26 in a substantially vertical orientation.

8. The method of any of claims 1-7, further characterized by removing the riser lower portion 26 from the wellhead 38 and repeating steps (a) – (f).

9. The method of any of claims 1-8, characterized in that the riser lower portion 26 is parked at a location proximate to the wellhead 38 and a plurality of additional wellheads 34.

10. A riser assembly 10 comprising:

a riser mount 12 set in the seafloor 14 and spaced apart from a proximate wellbore 40;

characterized by a riser lower section 26 having a lower end 22 selectively parked on the riser mount 12 and selectively engagable with a subsea wellhead 38 positioned on the wellbore 40; and

a riser extension 48 selectively connected between an upper end of the riser lower section 26 and a vessel 52 at sea level 46, so that when the riser lower section 26 is engaged with the wellhead 38 and the riser extension 48 is connected to the riser lower section 26, the wellhead 38 is accessible through the riser lower section 26 and the riser extension 48 from the vessel 52.

11. The riser assembly of claim 10, further characterized by a beacon 32 mounted on the riser lower section 26.

12. The riser assembly of claims 10 or 11, further characterized by a buoyancy module 28 provided on the riser lower section 26 that has a chamber 30 selectively containing a gas.

13. The riser assembly of any of claims 10-12, further characterized by a charging connection on the chamber 30 for conveying gas into the chamber 30.

14. The riser assembly of any of claims 10-13, further characterized by a riser tensioner joint 50 on the upper end of the riser section 48 that is where the riser extension 48 connects to the riser section.

15. The riser assembly of any of claims 10-14, further characterized by an emergency disconnect package 24 and lower riser package 22 provided on the riser lower section 26.

16. A method of deploying a riser 10 comprising:

characterized by providing a riser 10 having a lower end 26 with an emergency disconnect package 24 and a lower riser package 22;

parking the riser 10 subsea for a period of time on a riser mount 12 set in the seafloor 14 and spaced proximate to a wellhead 38;

emitting a beacon 32 from the parked riser 10;

providing a buoyancy module 28 on the riser 10;

moving the riser 10 from the parked position to the wellhead 38;

mounting a lower end of the riser 10 onto the wellhead 38;

completing a full length of the riser 10A by adding an extension 48 to an upper end of the riser 10;

coupling an upper end of the riser section to a facility 52 above sea surface 46; and

accessing the wellhead 38 from above the sea surface 46 through the full length of the riser 10A.

17. The method of claim 16, characterized in that the buoyancy module 28 further comprises a chamber 30 with a charging connection for conveying gas into the chamber 30, the method further characterized by charging the buoyancy module 28 with gas.

18. The method of claim 17, characterized in that the buoyancy module 28 is charged after step (e).

19. The method of any of claims 16-18, characterized in that the extension 48 is coupled above the buoyancy module 28.

20. The method of any of claims 16-19, further characterized by hydraulically clamping the lower end of the riser 10 to the riser mount 12.

21. The method of any of claims 16-20, characterized in that step (a) is characterized by towing sections of the riser 10 along the sea surface 46 and assembling the sections in situ with a remotely operated vehicle 58.

CLAIMS

What is claimed is:

1. A method of deploying a riser comprising:

a. parking a riser lower portion subsea for a period of time on a riser mount set in the seafloor and spaced proximate to a wellhead;

b. moving the riser lower portion from the parked position to the wellhead;

c. mounting a lower end of the riser lower portion onto the wellhead;

d. completing a full length of the riser by attaching a riser extension on an upper end of the riser lower portion;

e. coupling an upper end of the riser extension to a facility above sea surface;

f. accessing the wellhead from above the sea surface through the full length of the riser;

g. decoupling the riser extension from the facility;

h. detaching the riser extension from the riser lower portion;

i. returning the riser lower portion to the parked position;

j. emitting a beacon from the riser lower portion of step (a) so that the riser lower portion can be located subsea; and

k. moving the riser lower portion from the parked position to a wellhead that is different from the wellhead of step (b).

2. The method of claim 1, wherein in step (a), the upper end of the riser lower portion is below the draft of a vessel sailing on the sea surface.

3. The method of claim 1, wherein the riser being parked in step (a) has a length less than a depth of the sea where the riser is parked.

4. The method of claim 3, wherein step (d) comprises further connecting a riser section to the upper end of the riser lower portion, the riser section having a length less than a length of the riser lower portion.

5. The method of claim 1, wherein the wellhead comprises a first wellhead, and the riser lower portion is parked on a second wellhead located subsea.

6. The method of claim 1, further comprising providing a buoyancy module on the riser lower portion for maintaining the riser in a substantially vertical orientation.

7. The method of claim 1, further comprising removing the riser lower portion from the wellhead and repeating steps (a)-(f).

8. The method of claim 1, wherein the riser mount comprises a pedestal that projects upward from the seafloor and is parked at a location proximate to the wellhead and a plurality of additional wellheads, and wherein a connector alone secures the riser lower portion to the pedestal.

9. A riser assembly comprising:

a riser mount set in the seafloor and spaced apart from a proximate wellbore;

a riser lower section having a lower end selectively parked on the riser mount and selectively engagable with a subsea wellhead positioned on the wellbore;

a connector on the lower end of the riser lower section that is in selective engagement with the riser mount to secure the riser lower section with the riser mount, and that is in selective engagement with the subsea wellhead positioned on the wellbore to secure the riser lower section to the subsea wellbore;

a beacon mounted on the riser lower section so that the riser lower section can be located subsea; and

a riser extension selectively connected between an upper end of the riser lower section and a vessel at sea level, so that when the riser lower section is engaged with the wellhead and the riser extension is connected to the riser lower section, the wellhead is accessible through the riser lower section and the riser extension from the vessel.

10. The riser assembly of claim 9, further comprising a buoyancy module provided on the riser lower section that has a chamber selectively containing a gas.

11. The riser assembly of claim 10, further comprising a charging connection on the chamber for conveying gas into the chamber.

12. The riser assembly of claim 9, further comprising a riser tensioner joint on the upper end of the riser section that is where the riser extension connects to the riser section.

13. The riser assembly of claim 9, further comprising an emergency disconnect package and lower riser package provided on the riser lower section.

14. A method of deploying a riser comprising:

a. providing a riser having a lower end with an emergency disconnect package and a lower riser package;

b. parking the riser subsea for a period of time on a riser mount set in the seafloor and spaced proximate to a wellhead;

c. emitting a signal from a beacon on the parked riser;

d. locating the riser by using the signal from the beacon;

e. moving the riser from the parked position to the wellhead;

f. mounting the lower end of the riser onto the wellhead;

g. completing a full length of the riser by adding an extension to an upper end of the riser;

h. coupling an upper end of the riser to a facility above sea surface; and

i. accessing the wellhead from above the sea surface through the full length of the riser.

15. The method of claim 14, further comprising providing a buoyancy module on the riser that comprises a chamber, a charging connection on the chamber for conveying gas into the chamber, the method further comprising charging the buoyancy module with gas.

16. The method of claim 15, the buoyancy module is charged after step (e).

17. The method of claim 14, further comprising providing a buoyancy module and wherein the extension is coupled above the buoyancy module.

18. The method of claim 14, further comprising hydraulically clamping the lower end of the riser to the riser mount.

19. The method of claim 14, wherein step (a) comprises towing sections of the riser along the sea surface and assembling the sections in situ with a remotely operated vehicle.