

CLAIMS

1. A system, comprising:
 - a multi-barrier seal system, comprising:
 - a first seal assembly configured to provide a first sealing barrier between an auxiliary line and a mineral extraction system; and
 - a second seal assembly configured to provide a second sealing barrier between the auxiliary line and the mineral extraction system, wherein the second seal assembly is configured to shear through the auxiliary line, the second seal assembly comprising:
 - a seal housing having opposite first and second housing portions disposed about a ram receptacle, wherein the
 - a shearing ram disposed in the ram receptacle;
 - a first seal insert disposed in a first line passage of the first housing portion;
 - a second seal insert disposed in a second line passage of the second housing portion and aligned with the first line passage, wherein the seal housing is configured to pass the auxiliary line through the first line passage, the ram receptacle, and the second line passage, and wherein the first seal insert is biased against the shearing ram with a spring.
2. The system of claim 1, comprising the mineral extraction system.
3. The system of claim 2, wherein the mineral extraction system comprises a wellhead.
4. The system of claim 1, wherein the first seal assembly comprises a compressive seal configured to compressively seal around the auxiliary line to provide the first sealing barrier.

5. The system of claim 1, wherein the shearing ram has a shearing edge and a sealing surface.
6. The system of claim 5, wherein the shearing ram has an open-ended edge having the shearing edge.
7. The system of claim 6, wherein the shearing edge extends into a recess along the open-ended edge.
8. The system of claim 7, wherein the recess comprises a V-shaped recess or a U-shaped recess having the shearing edge.
9. The system of claim 5, wherein the shearing edge and the sealing surface are disposed on only one side of the shearing ram.
10. The system of claim 5, wherein the shearing ram comprises a ram body having first and second sides that are opposite from one another, wherein the first side comprises the shearing edge and the sealing surface, and the second side comprises a cavity extending into the ram body opposite from the shearing edge and the sealing surface.
11. The system of claim 1, wherein the second seal assembly comprises only one ram configured to move in one direction to shear through the auxiliary line and provide the second sealing barrier.
12. The system of claim 1, wherein the first seal insert is a floating seal insert held in place by the shearing ram.

13. The system of claim 1, wherein the first seal insert is disposed in a first recess in the first line passage, and the second line passage has a diameter that is greater than or equal to the recess in the first line passage.

14. The system of claim 5, comprising a drive coupled to the shearing ram, wherein the drive is configured to force the shearing ram toward the auxiliary line to shear through the auxiliary line and provide the second sealing barrier.

15. The system of claim 5, wherein the shearing ram is manually driven to force the shearing ram toward the auxiliary line to shear through the auxiliary line and provide the second sealing barrier.

16. A system, comprising:
a shearing seal configured to shear through an auxiliary line and provide a sealing barrier between the auxiliary line and a mineral extraction system, wherein the shearing seal comprises a single shearing ram having a sealing surface disposed on a first side and a shearing edge disposed along an open-ended edge, and an insert configured to form a seal with the sealing surface, and wherein the insert is a conduit with a passage configured to receive the auxiliary line.

17. The system of claim 16, wherein the shearing ram comprises a ram body having first and second sides that are opposite from one another, wherein the first side comprises the shearing edge and the sealing surface, the shearing edge extends into a recess along the open-ended edge, and the second side comprises a cavity extending into the ram body opposite from the shearing edge and the sealing surface.

18. The system of claim 17, comprising a seal housing having opposite first and second housing portions disposed about a ram receptacle, wherein the first housing portion comprises a first seal insert disposed in a first line passage, the

second housing portion comprises a second seal insert disposed in a second line passage aligned with the first line passage, and the shearing ram is disposed in the ram receptacle, wherein the seal housing is configured to pass the auxiliary line through the first line passage, the ram receptacle, and the second line passage, wherein the first seal insert is disposed in a first recess in the first line passage, and the second line passage has a diameter that is greater than or equal to the recess in the first line passage.

19. A method, comprising:

sealing an auxiliary line in a mineral extraction system by providing a first sealing barrier with a first seal assembly of a multi-barrier seal system, wherein the first sealing barrier creates a compressive seal by driving a sealing member with a retaining nut; and

sealing the auxiliary line in the mineral extraction system by shearing through the auxiliary line and providing a second sealing barrier with a second seal assembly of the multi-barrier seal system.

CLAIMS

1. A system, comprising:
a multi-barrier seal system, comprising:
a first seal assembly configured to provide a first sealing barrier between an auxiliary line and a mineral extraction system; and
a second seal assembly configured to provide a second sealing barrier between the auxiliary line and the mineral extraction system, wherein the second seal assembly is configured to shear through the auxiliary line.
2. The system of claim 1, comprising the mineral extraction system
3. The system of claim 2, wherein the mineral extraction system comprises a wellhead.
4. The system of claim 1, wherein the first seal assembly comprises a compressive seal configured to compressively seal around the auxiliary line to provide the first sealing barrier.
5. The system of claim 1, wherein the second seal assembly comprises a shearing ram having a shearing edge and a sealing surface.
6. The system of claim 5, wherein the shearing ram has an open-ended edge having the shearing edge.
7. The system of claim 6, wherein the shearing edge extends into a recess along the open-ended edge.
8. The system of claim 7, wherein the recess comprises a V-shaped recess or a U-shaped recess having the shearing edge.

9. The system of claim 5, wherein the shearing edge and the sealing surface are disposed on only one side of the shearing ram.

10. The system of claim 5, wherein the shearing ram comprises a ram body having first and second sides that are opposite from one another, wherein the first side comprises the shearing edge and the sealing surface, and the second side comprises a cavity extending into the ram body opposite from the shearing edge and the sealing surface.

11. The system of claim 1, wherein the second seal assembly comprises only one ram configured to move in one direction to shear through the auxiliary line and provide the second sealing barrier.

12. The system of claim 5, comprising a seal housing having opposite first and second housing portions disposed about a ram receptacle, wherein the first housing portion comprises a first seal insert disposed in a first line passage, the second housing portion comprises a second seal insert disposed in a second line passage aligned with the first line passage, the shearing ram is disposed in the ram receptacle, and the seal housing is configured to pass the auxiliary line through the first line passage, the ram receptacle, and the second line passage.

13. The system of claim 12, wherein the first seal insert is a floating seal insert held in place by the shearing ram.

14. The system of claim 12, wherein the first seal insert is disposed in a first recess in the first line passage, and the second line passage has a diameter that is greater than or equal to the recess in the first line passage.

15. The system of claim 5, comprising a drive coupled to the shearing ram, wherein the drive is configured to force the shearing ram toward the auxiliary line to shear through the auxiliary line and provide the second sealing barrier.

16. The system of claim 5, wherein the shearing ram is manually driven to force the shearing ram toward the auxiliary line to shear through the auxiliary line and provide the second sealing barrier.

17. A system, comprising:

a shearing seal configured to shear through an auxiliary line and provide a sealing barrier between the auxiliary line and a mineral extraction system, wherein the shearing seal comprise a shearing ram having a sealing surface disposed on a first side and a shearing edge disposed along an open-ended edge.

18. The system of claim 17, wherein the shearing ram comprises a ram body having first and second sides that are opposite from one another, wherein the first side comprises the shearing edge and the sealing surface, the shearing edge extends into a recess along the open-ended edge, and the second side comprises a cavity extending into the ram body opposite from the shearing edge and the sealing surface.

19. The system of claim 18, comprising a seal housing having opposite first and second housing portions disposed about a ram receptacle, wherein the first housing portion comprises a first seal insert disposed in a first line passage, the second housing portion comprises a second seal insert disposed in a second line passage aligned with the first line passage, and the shearing ram is disposed in the ram receptacle, wherein the seal housing is configured to pass the auxiliary line through the first line passage, the ram receptacle, and the second line passage, wherein the first seal insert is disposed in a first recess in the first line passage, and the second line passage has a diameter that is greater than or equal to the recess in the first line passage.

20. A method, comprising:
- sealing an auxiliary line in a mineral extraction system by providing a first sealing barrier with a first seal assembly of a multi-barrier seal system; and
 - sealing the auxiliary line in the mineral extraction system by shearing through the auxiliary line and providing a second sealing barrier with a second seal assembly of the multi-barrier seal system.