WHAT IS CLAIMED IS:

1. A swell packer comprising:

a swellable metal sealing element,

wherein the swellable metal sealing element is configured to irreversibly react with a brine to form a metal hydroxide reaction product which forms a permanent seal with an adjacent surface.

2. The swell packer of claim 1, wherein the swellable metal sealing element comprises a metal selected from the group consisting of magnesium, calcium, aluminum, and any combination thereof.

3. The swell packer of claim 1 or 2, wherein the swellable metal sealing element comprises a metal alloy comprising a metal selected from the group consisting of magnesium, calcium, aluminum, and any combination thereof.

4. The swell packer of any of claims 1 to 3, further comprising a swellable non-metal sealing element.

5. The swell packer of any of claims 1 to 4, further comprising a non-swelling reinforcement layer.

6. A method for forming a seal in a wellbore, comprising:

providing a swell packer comprising a swellable metal sealing element, wherein the swell packer is disposed on a conduit in the wellbore;

exposing the swellable metal sealing element to a brine to irreversibly react the swellable metal sealing element with the brine to form a metal hydroxide reaction product; and

contacting an adjacent surface to the swellable metal sealing element with the metal hydroxide reaction product to form a permanent seal with the metal hydroxide reaction product allowing or causing to allow the swellable metal sealing element to swell.

7. The method of claim 6, wherein the adjacent surface is a wall of the wellbore.

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8. The method of claim 6 or 7, wherein the conduit is a first conduit; wherein the swellable metal sealing element forms the seal between the first conduit and a second conduit.

9. The method of any of claims 6 to 8, wherein the swell packer comprises two slates; wherein the swellable metal sealing element is disposed on the two slats.

10. The method of any of claims 6 to 9, wherein the swellable metal sealing element comprises a gap and wherein a line is disposed within the gap.

11. The method of any of claims 6 to 10, wherein the conduit comprises a profile variance on its exterior surface; wherein the swellable metal sealing element is positioned over the profile variance.

12. The method of any of claims 6 to 11, wherein the swellable metal sealing element comprises a binder.

13. The method of any of claims 6 to 12, wherein the swellable metal sealing element comprises a metal oxide.

14. The method of any of claims 6 to 13, wherein the swell packer is disposed in a wellbore zone having a temperature greater than 350° F (176.667° C).

15. A system for forming a seal in a wellbore, comprising:
a swell packer comprising a swellable metal sealing element, and
a conduit;
wherein the swellable metal sealing element is configured to irreversibly react with a brine to form a metal hydroxide reaction product which forms a permanent seal with an adjacent surface; and
wherein the swell packer is disposed on the conduit.

16. The system of claim 15, wherein the swell packer further comprises a swellable non-metal sealing element.

17. The system of claim 15 or 16, wherein the conduit comprises a profile variance on its exterior surface; wherein the swellable metal sealing element is positioned over the profile variance.

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