WHAT IS CLAIMED IS:

1. A flow control system for use with a subterranean well, the system comprising:

a flow chamber through which a fluid composition flows; and

a closure device which is biased toward a closed position in which the closure device prevents flow through the flow chamber, the closure device being displaced to the closed position in response to an increase in a ratio of undesired fluid to desired fluid in the fluid composition.

2. The system of claim 1, wherein a biasing device biases the closure device toward the closed position.

3. The system of claim 1, wherein the closure device displaces automatically in response to the increase in the ratio of undesired to desired fluid.

4. The system of claim 1, wherein the increase in the ratio of undesired to desired fluid causes degradation of a structure which resists displacement of the closure device.

5. The system of claim 4, wherein the fluid composition flows through the structure to an outlet of the flow chamber.

6. The system of claim 4, wherein the structure encircles an outlet of the flow chamber.

7. The system of claim 4, wherein the increase in the ratio of undesired to desired fluid causes corrosion of the structure.

8. The system of claim 4, wherein the increase in the ratio of undesired to desired fluid causes erosion of the structure.

9. The system of claim 1, wherein the increase in the ratio of undesired to desired fluid causes breakage of the structure.

10. The system of claim 1, wherein the closure device, when released, prevents flow to an outlet of the flow chamber.

11. The system of claim 1, wherein the increase in the ratio of undesired to desired fluid in the fluid composition results from an increase in water in the fluid composition.

12. The system of claim 1, wherein the increase in the ratio of undesired to desired fluid in the fluid composition results in an increase in a velocity of the fluid composition in the flow chamber.

13. The system of claim 1, wherein the increase in the ratio of undesired to desired fluid in the fluid composition results from an increase in gas in the fluid composition.

14. A flow control system for use in a subterranean well, the system comprising:

a flow chamber through which a fluid composition flows;

a closure device; and

a structure which prevents the closure device from being displaced to a closed position in which the closure device prevents flow through the flow chamber, and

wherein the fluid composition flows through the structure to an outlet of the flow chamber.

15. The system of claim 14, wherein the closure device displaces to the closed position in response to degradation of the structure by the fluid composition.

16. The system of claim 14, wherein the structure is degraded in response to an increase in a ratio of undesired fluid to desired fluid in the fluid composition.

17. The system of claim 14, wherein the closure device is released automatically in response to the degrading of the structure.

18. The system of claim 14, wherein an increase in a ratio of undesired fluid to desired fluid in the fluid composition causes erosion of the structure.

19. The system of claim 14, wherein an increase in a ratio of undesired fluid to desired fluid in the fluid composition causes corrosion of the structure.

20. The system of claim 14, wherein an increase in a ratio of undesired fluid to desired fluid in the fluid composition causes breakage of the structure.

21. The system of claim 14, further comprising a biasing device which biases the closure device toward the closed position.

22. The system of claim 14, wherein the degrading of the structure results from an increase in water in the fluid composition.

23. The system of claim 14, wherein the degrading of the structure results from an increase in a velocity of the fluid composition in the flow chamber.

24. The system of claim 14, wherein the degrading of the structure results from an increase in gas in the fluid composition.

25. The system of claim 14, wherein the structure encircles the outlet.

CLAIMS

1. A flow control system (52) for use with a subterranean well, the system comprising:

a flow chamber (46) through which a fluid composition (36) flows;

a closure device (54) which is biased toward a closed position by a biasing device (60), in which the closure device (54) prevents flow of undesired fluid in the fluid composition (36) through the flow chamber (46), the closure device being displaced to the closed position by an increase in contact between the undesired fluid and

a structure (56), wherein while the structure (56) resists displacement of the closure device (54) it allows the fluid composition (36) to flow through the structure (56) to an outlet (40) of the flow chamber (46).

2. The system (52) of claim 1, wherein the closure device (54) displaces automatically.

3. The system (52) of claim 1, wherein the undesired fluid degrades the structure (56).

4. The system (52) of claim 1, wherein the structure (56) encircles an outlet (40) of the flow chamber (46).

5. The system (52) of claim 1, wherein the undesired fluid corrodes the structure (56).

6. The system (52) of claim 1, wherein the undesired fluid erodes the structure (56).

7. The system (52) of claim 1, wherein the undesired fluid breaks the structure (56).

8. The system of claim 1, wherein the undesired fluid comprises water.

9. The system of claim 1, wherein the ratio of undesired to desired fluid in the fluid composition increases a velocity of the fluid composition (36) in the flow chamber.

10. The system of claim 1, wherein the undesired fluid comprises gas.

11. The system (52) of claim 1, wherein the closure device (54) has a cylindrical shape, and is somewhat larger in diameter than the outlet (40) for covering and preventing flow through the outlet (40).

12. The system (52) of claim 1, wherein the closure device (54) further comprising a seal or sealing surface for sealingly engaging a sealing surface about the outlet (40).

13. The system (52) of claim 1, wherein the biasing device (60) may be a coil spring, Belleville washers or shape memory element.