CLAIMS

1. A method for operating a safety valve, the method comprises:

providing a safety valve comprising:

a rotatable helical slot cylinder having a body and a throughbore running axially through the body; wherein the helical slot cylinder additionally comprises an upper helical slot and a lower helical slot; wherein the upper helical slot and the lower helical slot are slotted in the body of the helical slot cylinder and the helices of the upper helical slot and the lower helical slot are the inverse of each other;

an upper sleeve coupled to the upper helical slot of the helical slot cylinder and having a throughbore,

a lower sleeve coupled to the lower helical slot of the helical slot cylinder and having a throughbore; wherein the upper sleeve and the lower sleeve are disposed within the throughbore of the helical slot cylinder;

a weighted component directly or indirectly coupled to the upper sleeve, and

a flapper assembly directly or indirectly coupled to the lower sleeve;

applying pressure to the weighted component to push it against gravity thereby pulling the upper sleeve with the weighted component and rotating the helical slot cylinder in a first direction; wherein rotation of the helical slot cylinder also extends the lower sleeve out of the helical slot cylinder; and

inducing a flapper of the flapper assembly to open through the extending of the lower sleeve out of the helical slot cylinder.

2. The method of claim 1, further comprising:

removing the pressure to the weighted component to release the weighted component; whereby releasing the weighted component pushes the upper sleeve into the helical slot cylinder thereby rotating the helical slot cylinder in a second direction that is opposite of the first direction.

3. The method of claim 2, wherein rotating the helical slot cylinder in the second direction pulls the lower sleeve into the helical slot cylinder and induces a closing of the flapper of the flapper assembly.

4. The method of claim 1, wherein the safety valve is installed in a storage well.

5. The method of claim 1, wherein the safety valve does not comprise a spring.