

Workover / Completion Systems

Series 5200 Controlled Volume Displacement System (CVDS)*

(Patent Applied For)

General

It has been necessary and/or desirable at times to place a specific volume of fluid at a precise location in a wellbore. This is easily accomplished using wireline because the wireline bailer contains a specific volume which can be located at a precise depth. However, problems exist in wells with high angles, horizontal sections, cork-screwed tubing, and when larger fluid volumes make wireline deployment impractical. Additionally, small cement volumes placed by multiple runs in larger diameters create a series of short individual cement plugs stacked atop one another rather than a single homogenous plug.

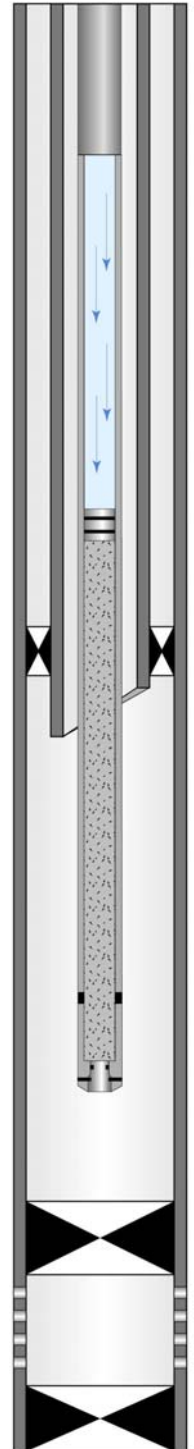
The TTS Series 5200 Controlled Volume Displacement System (CVDS) offers a remedy to these problems. The CVDS utilizes a series of polished I.D. tubulars (existing reeled tubing strings and IF threaded pipe strings are also suitable) to deploy a specific volume of fluid. The CVDS design and operating procedures allow for placement of a precise volume of fluid (e.g., cement, plastic, acid) at a specific location in the well without over displacement.

Application

- ♦ Installation of a single homogenous cement plug
- ♦ Spotting of a controlled volume in a precise interval
- ♦ Deployment of large volumes in a single trip
- ♦ Deployment of fluid in horizontal or high angle wells
- ♦ Deployment in wells with limited wireline deployment options

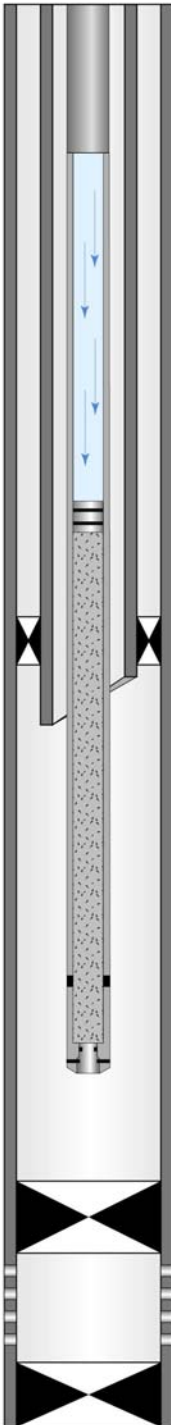
Features/Benefits

- ♦ Controlled displacement prevents over displacement, insuring fluids are located at the proper interval. They can perform their desired function and not cause irreparable damage in other intervals.
- ♦ A single homogenous cement plug eliminates the contamination zones that occur atop each dump interval when using multiple wireline bailer runs, therefore, yielding a higher integrity plug.
- ♦ Specific volume allows specialized pumping operations of expensive treating agents.

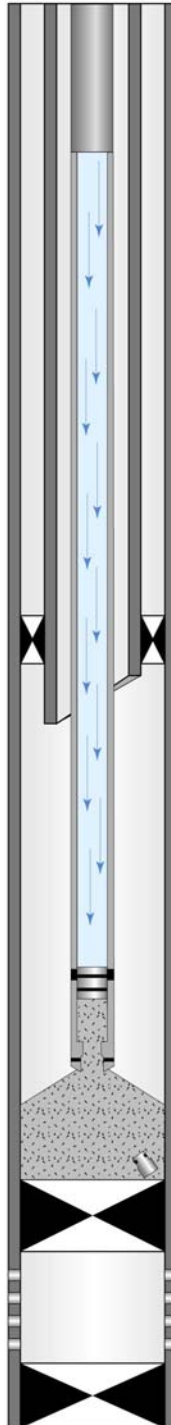


Controlled Volume Displacement System (CVDS)

Run in Position



Displacement Position



Circulating

