## **Cementing Program**

## 4-1/2" Production Casing Continued

B. Once the first stage cement is in place (Figure 1), drop the **EXTERNAL CASING PACKER / DV TOOL ACTUATION DEVICE** (a.k.a. Ball, Bomb, Plug, Dart).

- C. With guidance from the tool manufacturers representative, set the external casing packer and open the DV tool.
- D. Circulate one complete circulation through the DV tool to ensure any residual cement from the first stage is removed from the annulus above the combination tool.

E. Pump the second stage cement into position followed by the SECOND STAGE FOLLOWING PLUG. Displace cement and plug with drilling fluid. The SECOND STAGE FOLLOWING PLUG will close the DV tool ports when the cement is in place