(a) **Sand plug extension evolution**

- $t = 15$ min
- $t = 30$ min
- $t = 45$ min
- $t = 55$ min

Disconnection time $t_f = 46$ min

(b) **Final stages**

- Disconnection time $t_f = 70$ min
- $t_f = 46$ min
- $t_f = 47$ min

Figure 4