D24561.1

Analysis Performed to Reach Opinions

- Reviewed hundreds of ROV videos and documents to determine existence and characteristics of slug flow
- Conclusively linked slug flow pattern to motion of a portion of the riser ("buoyant loop")
- Built multiple detailed models of the full riser system and kink using industry-standard multiphase flow simulators, incorporating the motion of the buoyant loop
- Performed over 1,000 simulations over a 6-7 month period to match simulation results to the unique characteristics of the observed slug flow and determine flow rate

Source: TREX 011683 D24561