



## New Desktop Modelling Tool Brings Unparalleled Insight into Problematic Oilfield Microbiology

**Rawwater, the global specialist in oilfield reservoir souring forecasting, simulation and mitigation, has launched a brand-new version of its industry leading DynamicTVS® predictive oilfield souring desktop modelling tool. The program will bring previously unavailable levels of souring forecasting capability to oil majors and service companies around the world.**

Rawwater has led the way in understanding the causes and effects of microbially induced oilfield reservoir souring for more than 30 years. Its work considers the impact of water-flooding on oilfield reservoirs (typically with sulfate-containing injection water) during secondary recovery operations – and the effect that introduced sulfate-reducing microorganisms (SRM), combined with changing downhole temperature and pressure conditions, can have on a reservoir's propensity to produce sour fluid.

In addition to incorporating Rawwater's recently developed 'early-stage' souring modelling function, which enables operators to establish the likelihood of future souring at the earliest stages of field planning and development, the model now includes improved history matching and 'hindcasting' capabilities, and the facility to conduct Monte Carlo analysis for enhanced sensitivity processing.

"Having led the understanding of microbiological oilfield reservoir souring studies for so many years, we have taken great care to ensure that the latest version of our modelling tool brings significant new benefits to our global customer base," said Rawwater's Head of Division and Senior Research Scientist, Matt Streets. "We are particularly excited about the advances we have made with regard to hindcasting and rapid, multiple data analysis. The enhanced hindcasting capability within the software enables us to consider retrospective data from any asset in order to forecast its future souring potential, while the use of advanced Monte Carlo-style analysis techniques allow the results of multiple input sensitivities to be calculated almost instantaneously.

"With the inclusion of our early-stage forecasting capability," Matt adds. "We are convinced that DynamicTVS® is the ultimate modelling tool for every oil major, operator and service company that wishes to benefit from early, accurate forecasting of oilfield souring, in order that the most cost-effective mitigation strategies, including optimised chemical dosing, can take place. After all, left unchecked, problematic reservoir microbiology can cost many millions of dollars annually to treat."

Developed over many years, Rawwater's software modelling techniques use operational, planning and survey data to generate future profiles of hydrogen sulfide (H<sub>2</sub>S). Uniquely, the software is supported and constantly updated with laboratory-based calibration data produced by the organisation's advanced high-pressure bioreactor studies, which simulate the pressure and temperature conditions found downhole.

