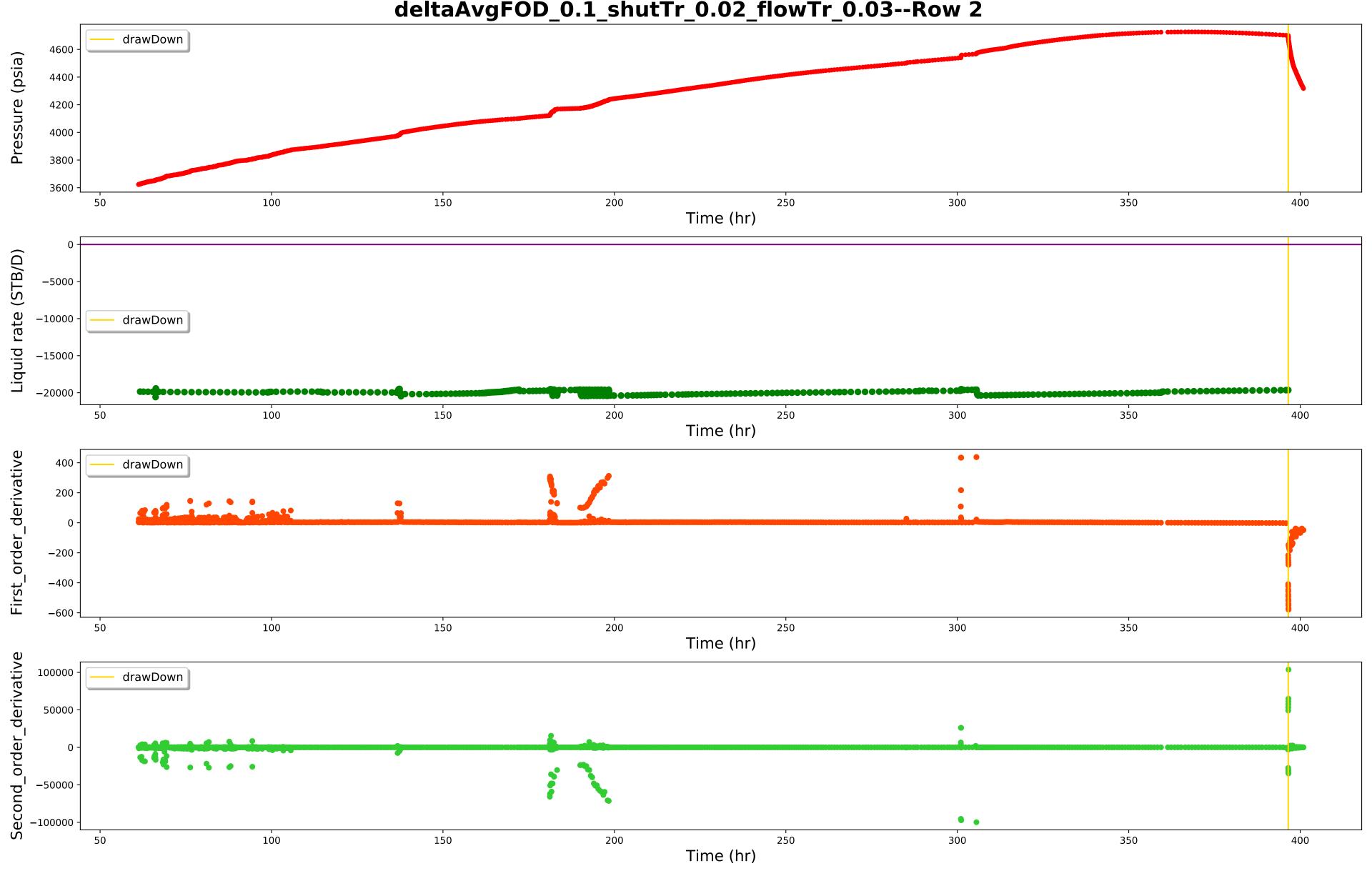
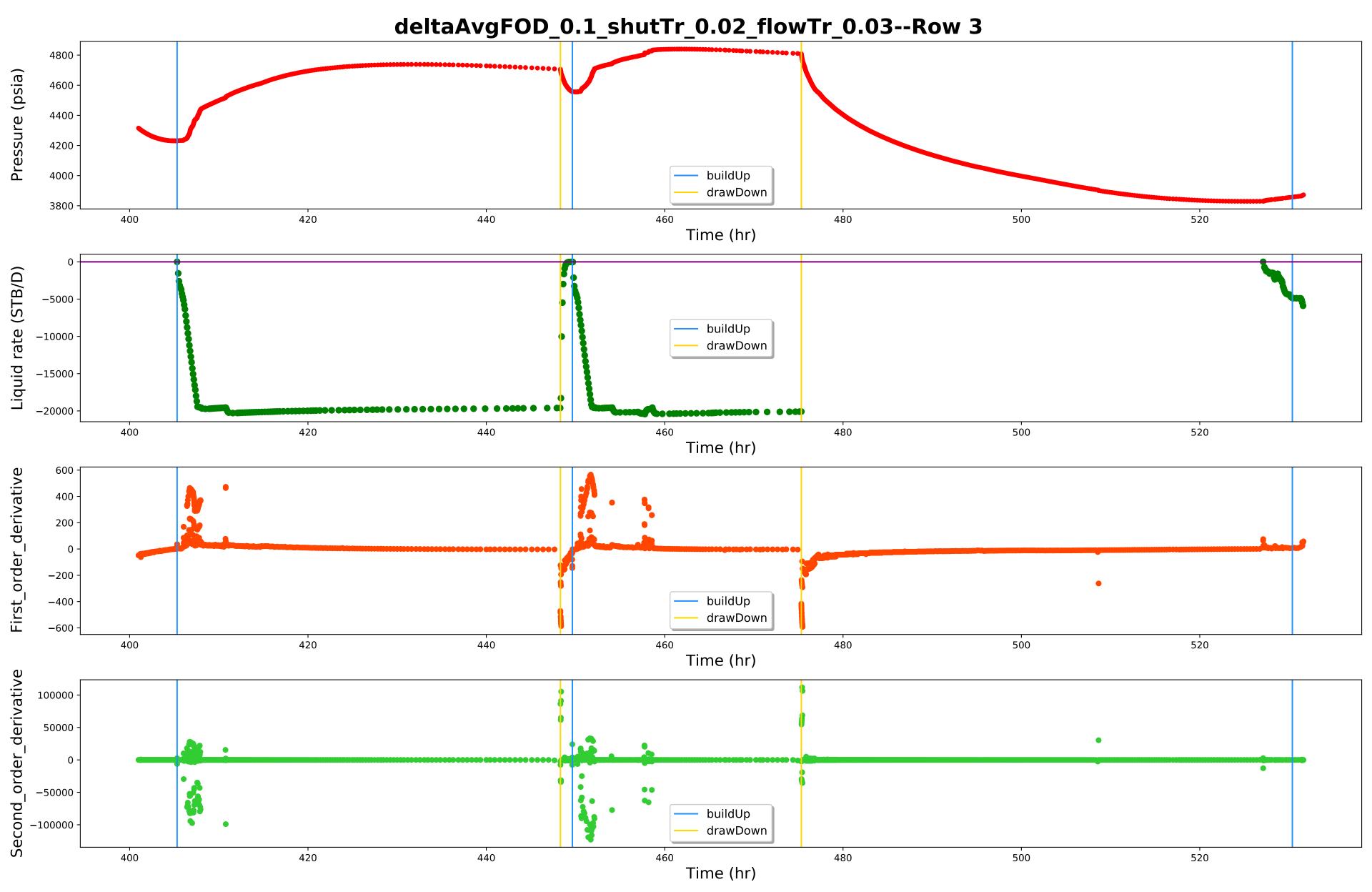
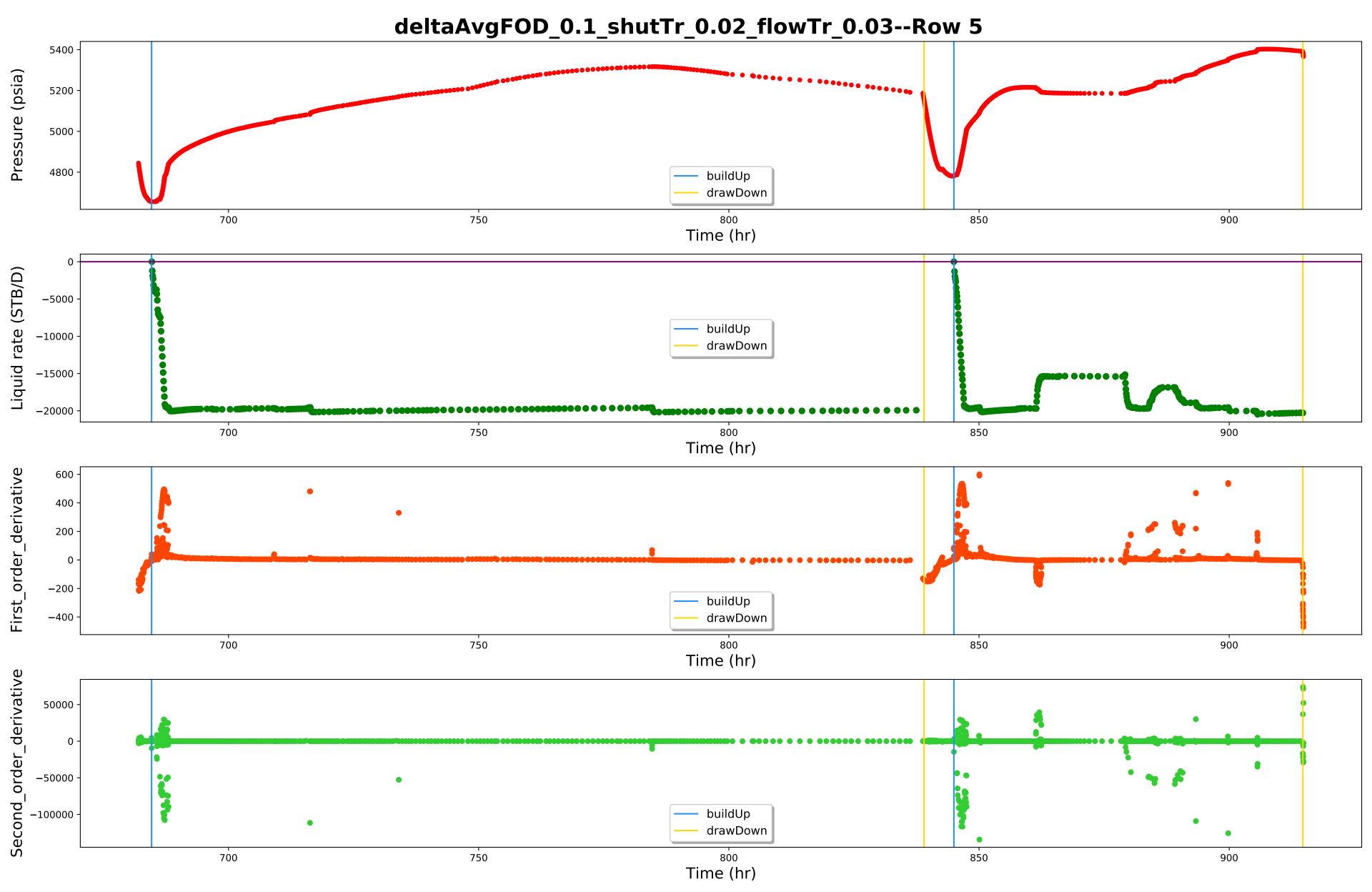
deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 1 Pressure (psia) Time (hr) Fidnid rate (STB/D) -10000 -15 -20000 Time (hr) First_order_derivative Time (hr) Second order derivative Time (hr)

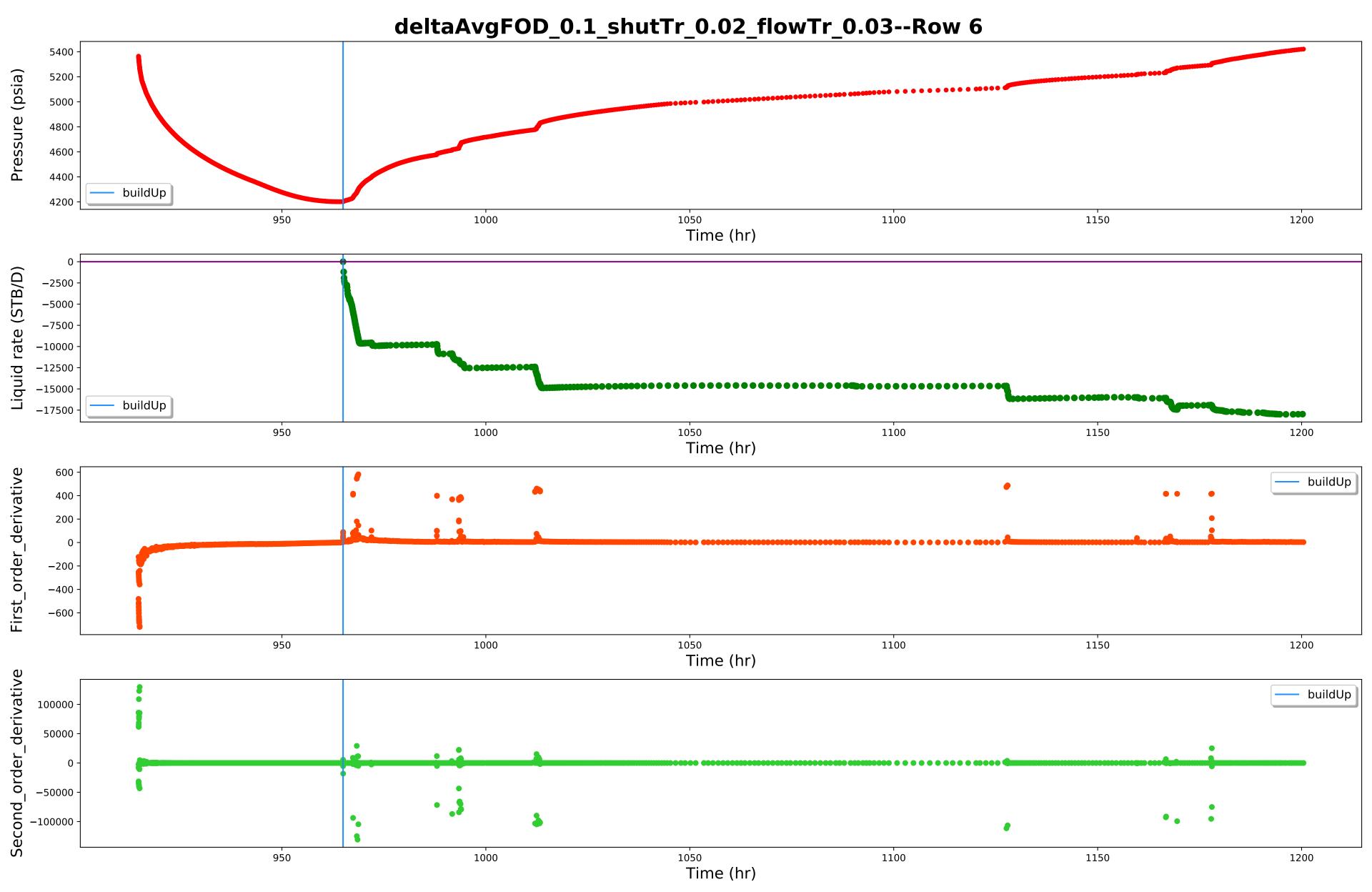
deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 2

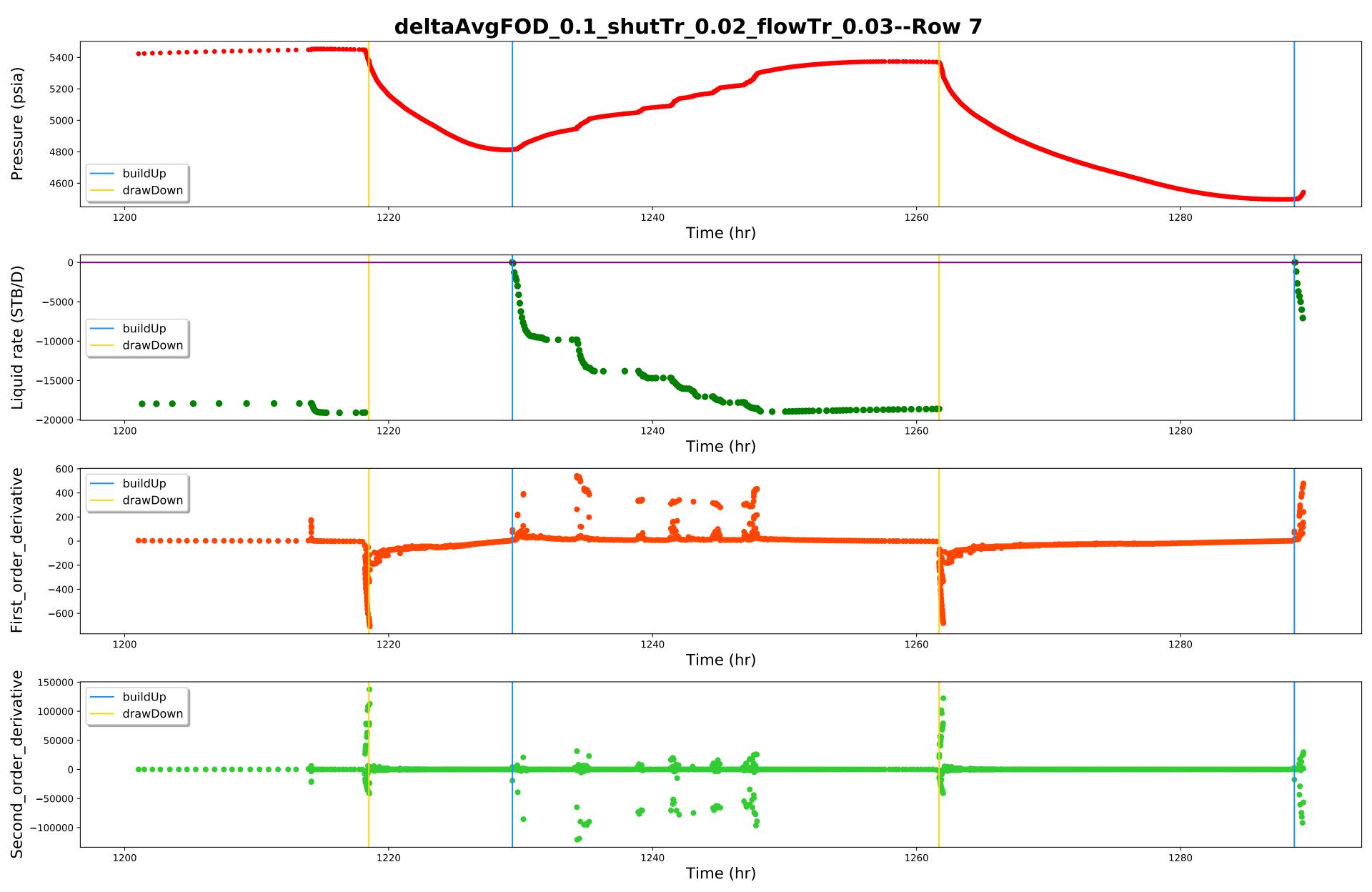


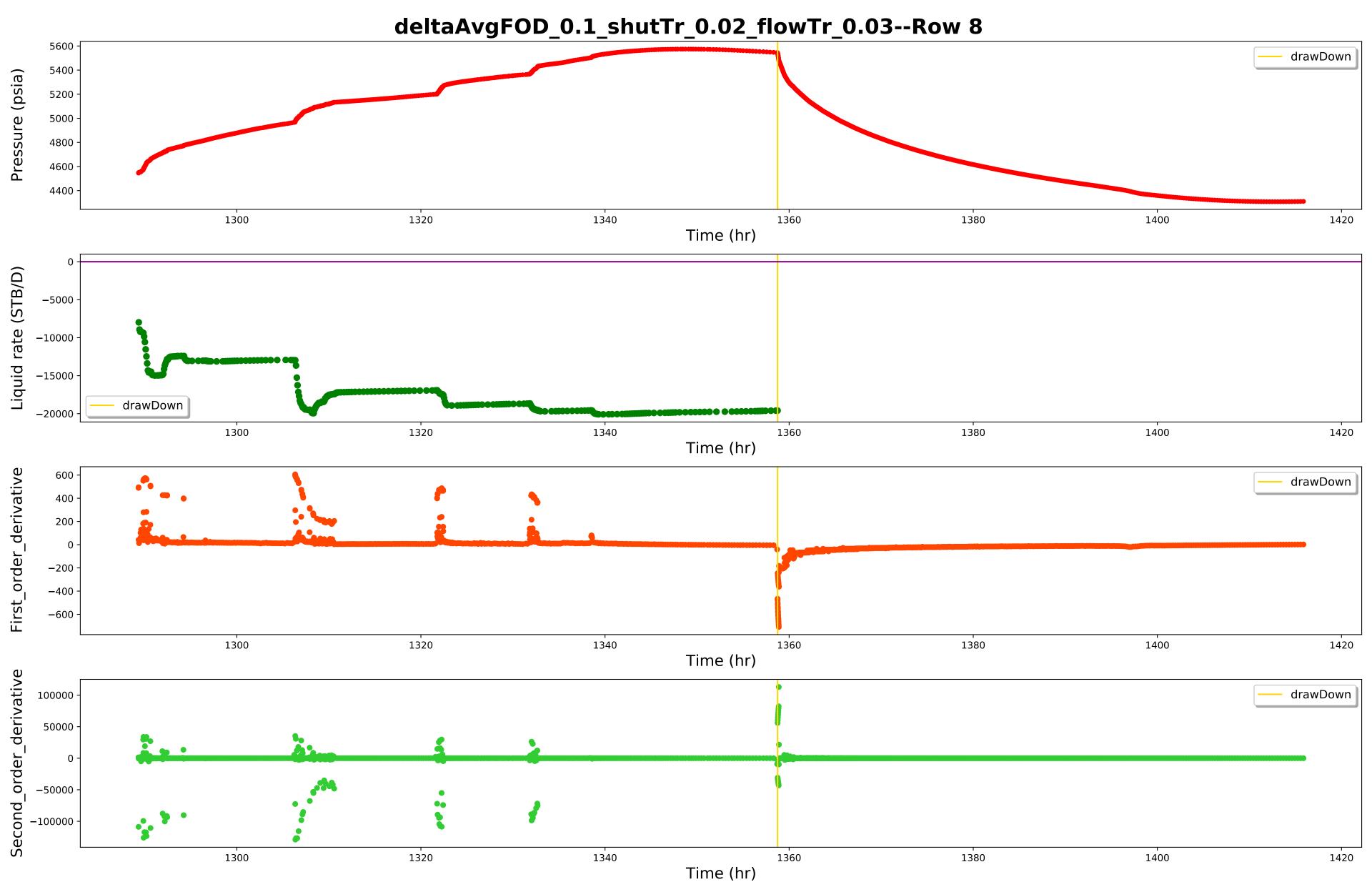


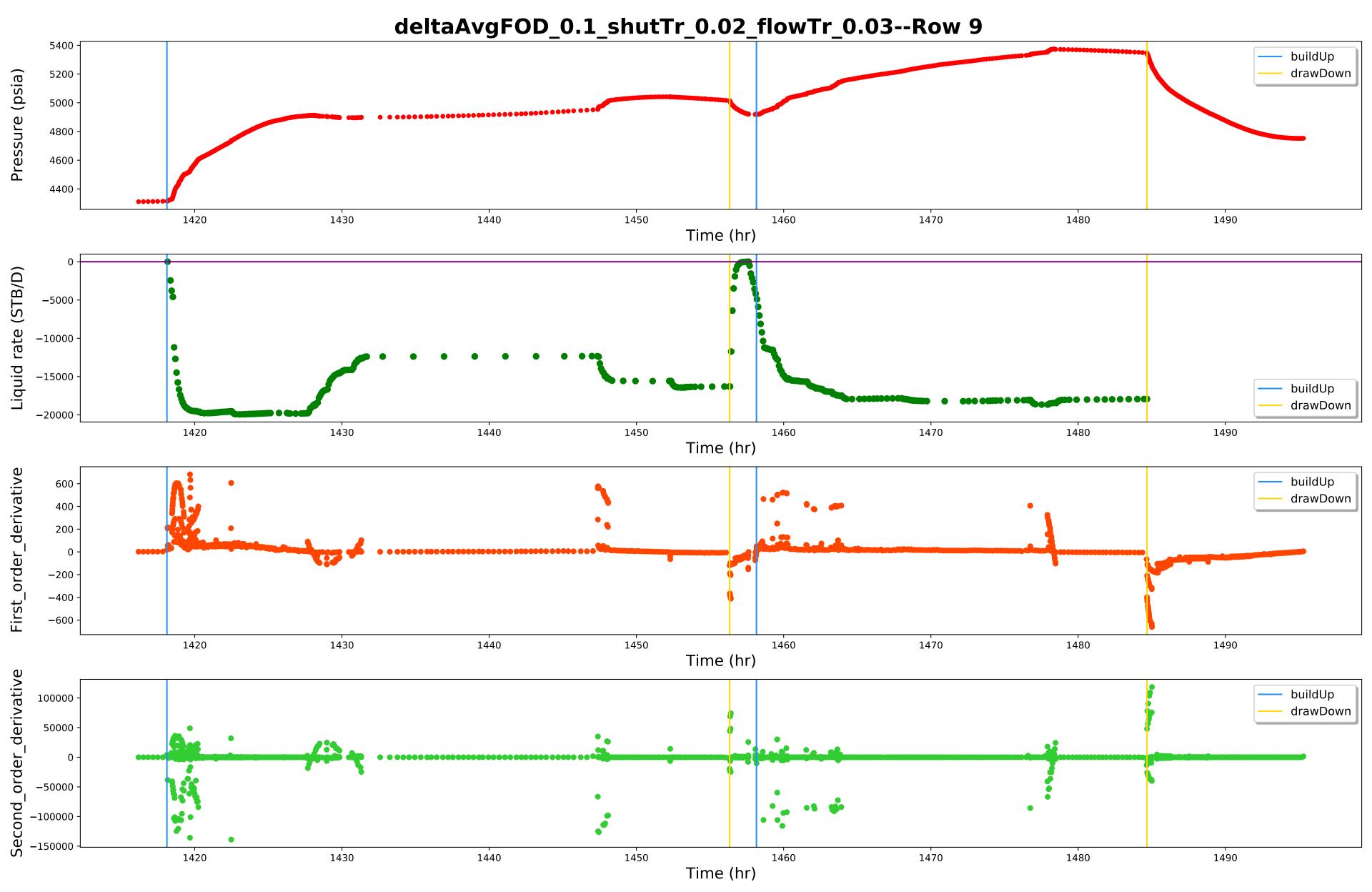
deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 4 buildUp Pressure (psia) draw DownTime (hr) Liquid rate (STB/D) -5000 buildUp -10000 drawDown -15000 Time (hr) First_order_derivative **-200** -400 buildUp drawDown-600 Time (hr) Second_order_derivative buildUp drawDown -50000 -100000 Time (hr)

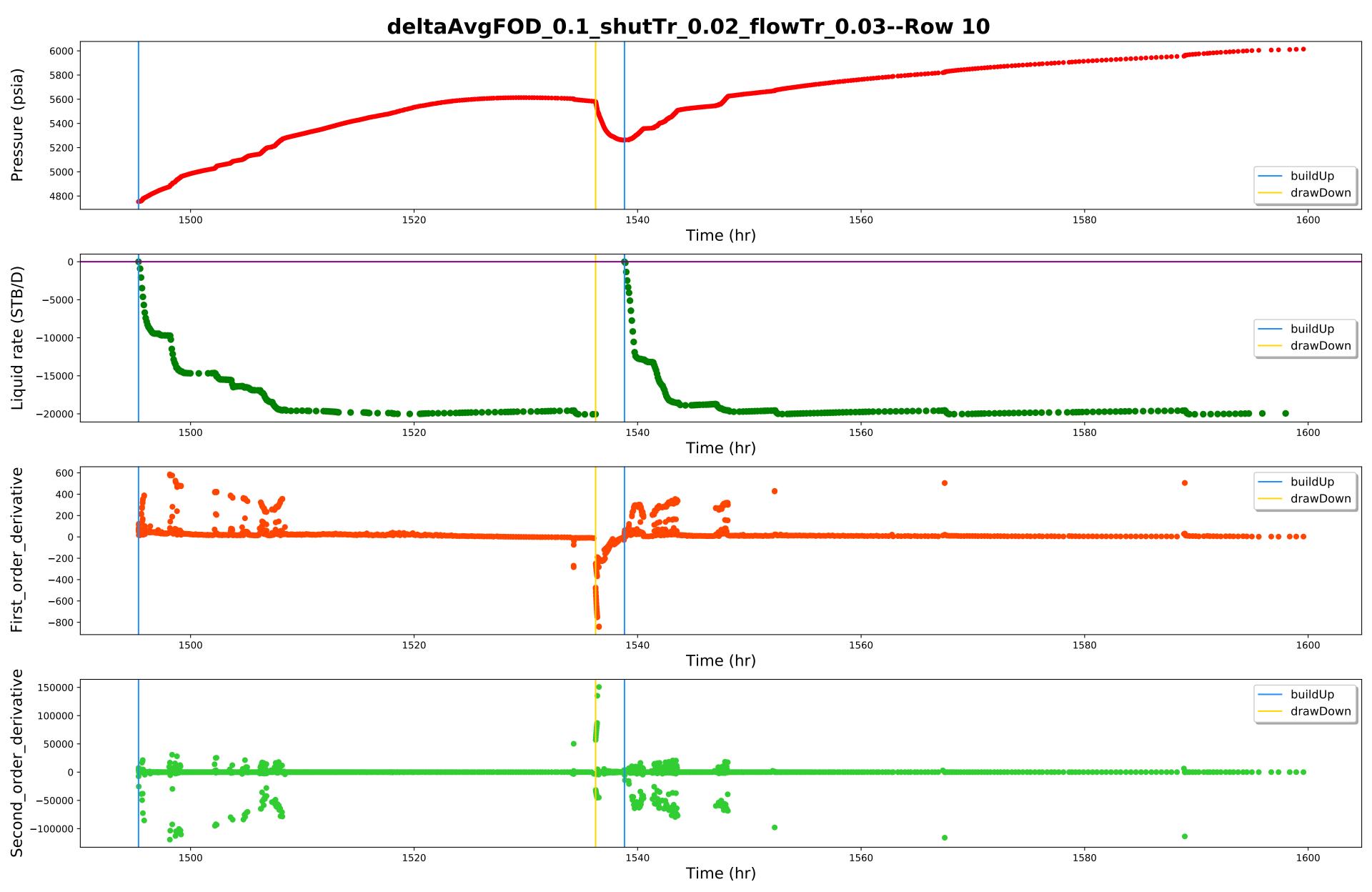






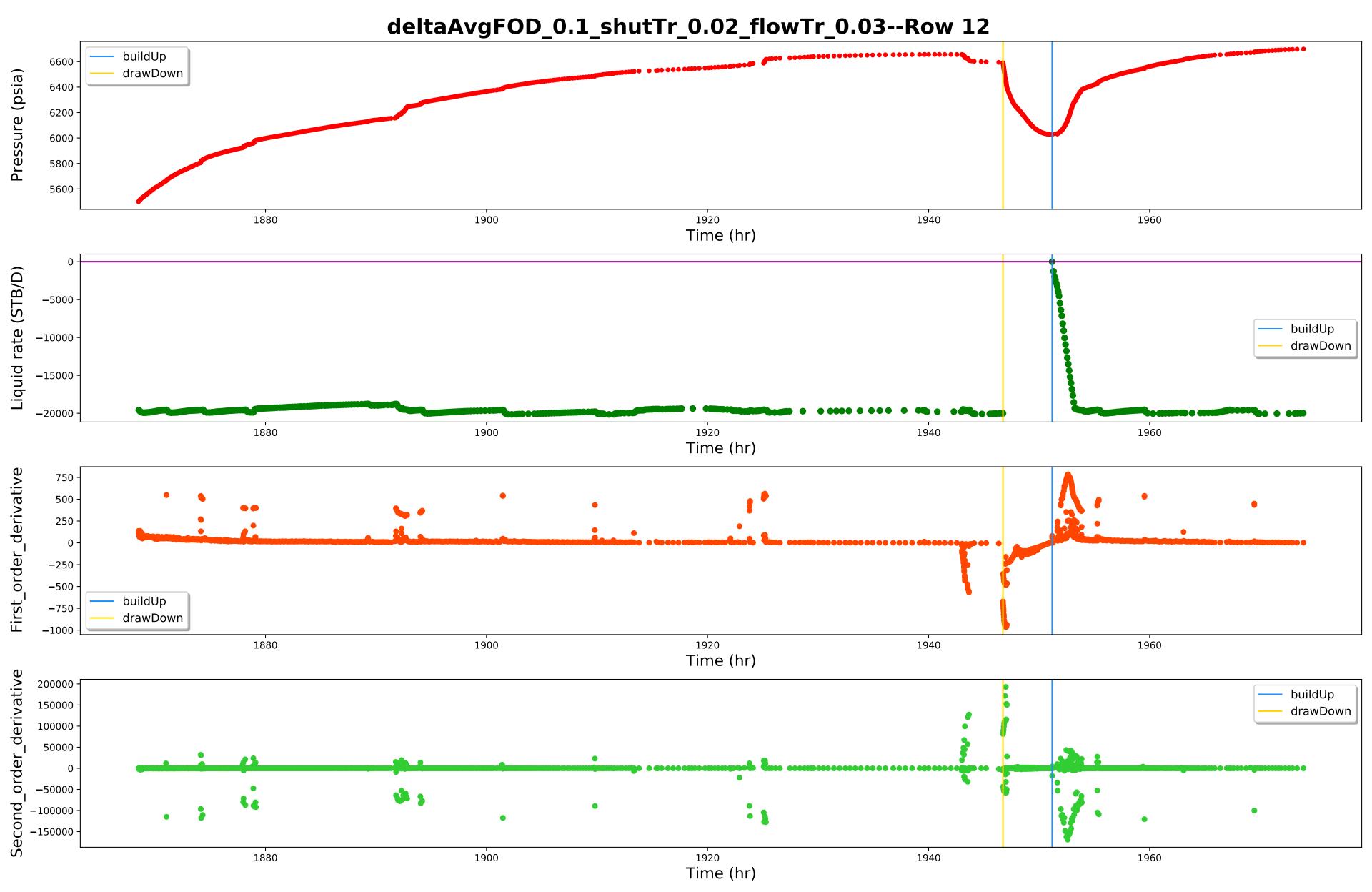


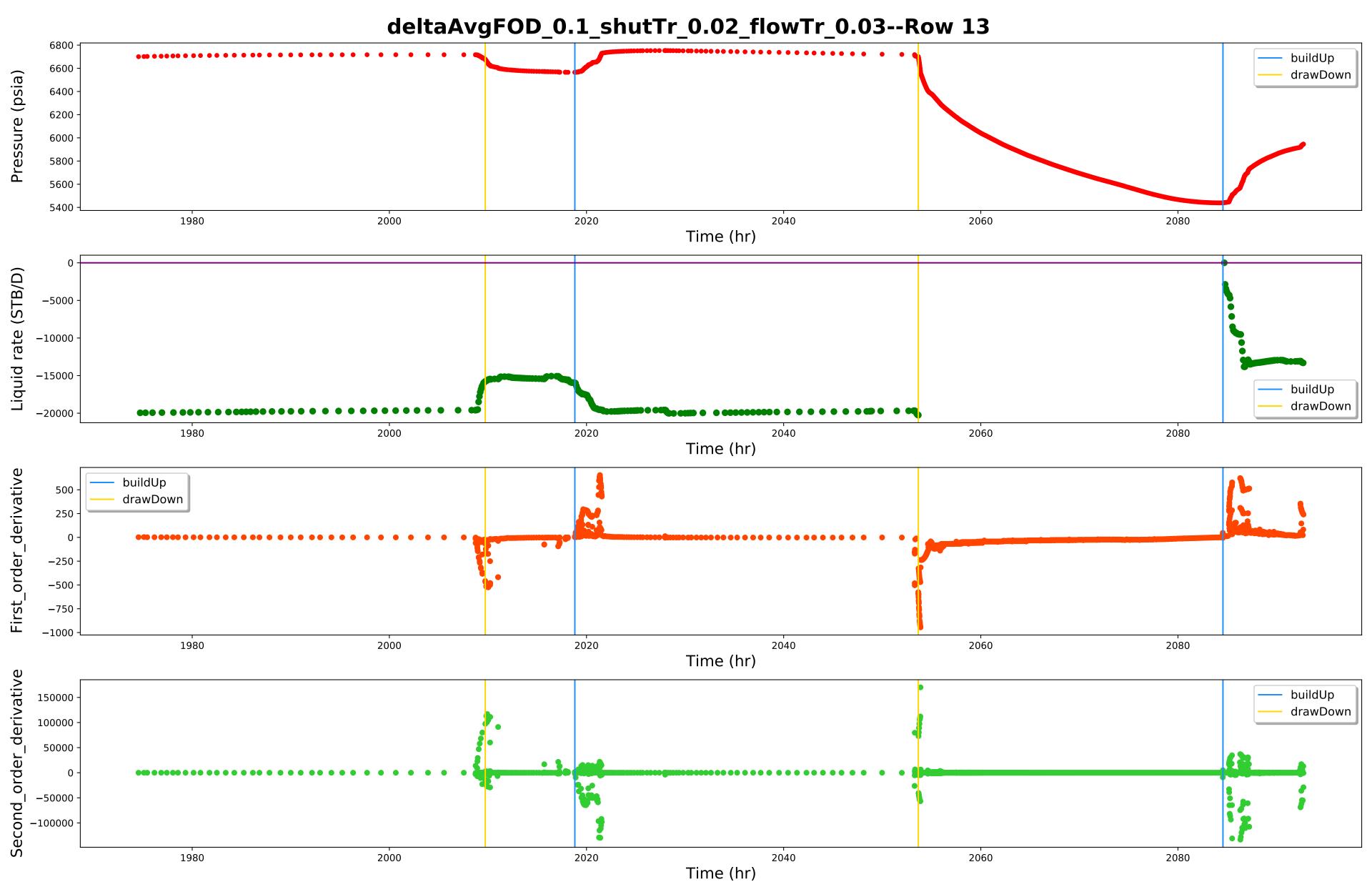




deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 11

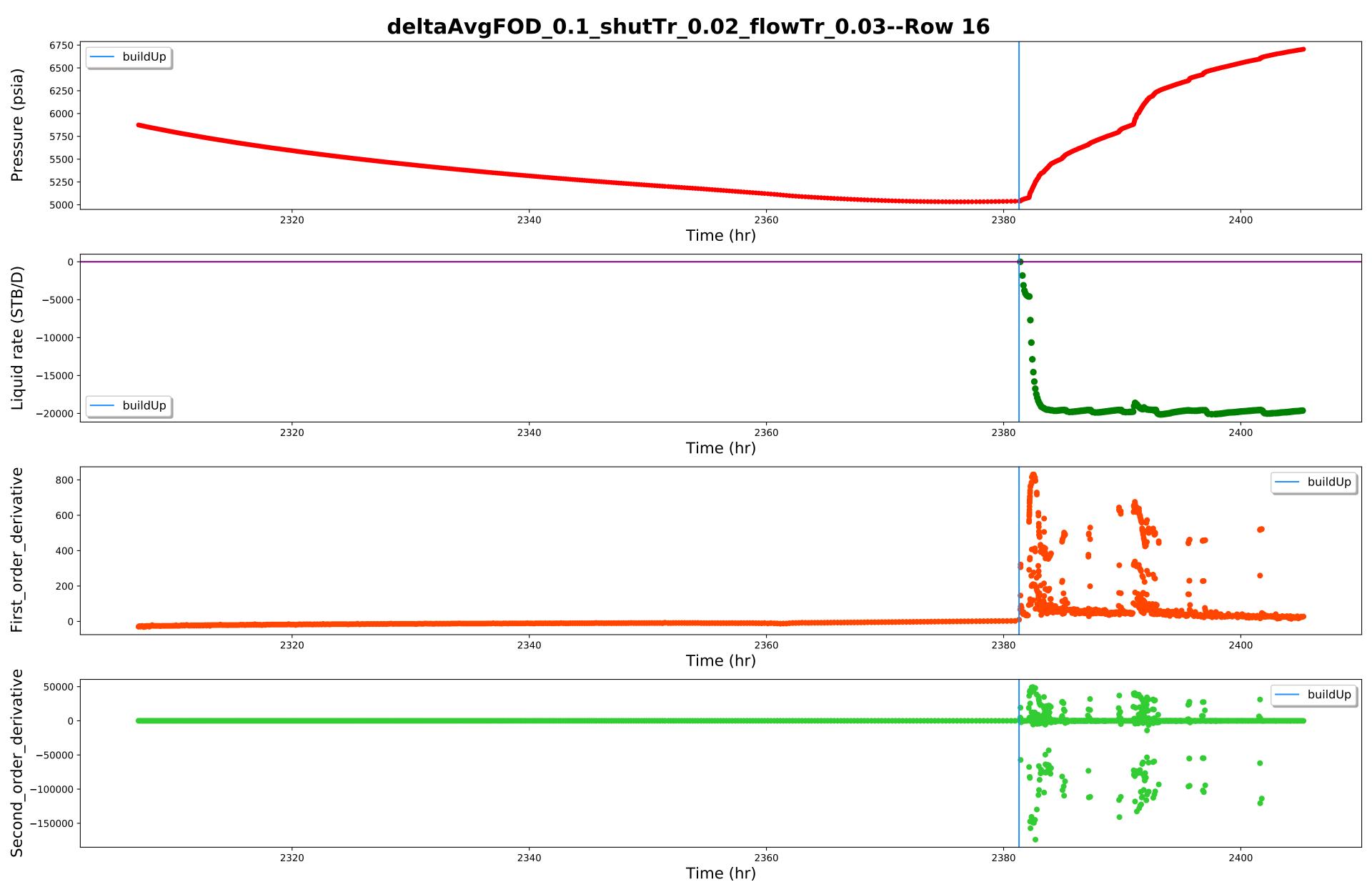




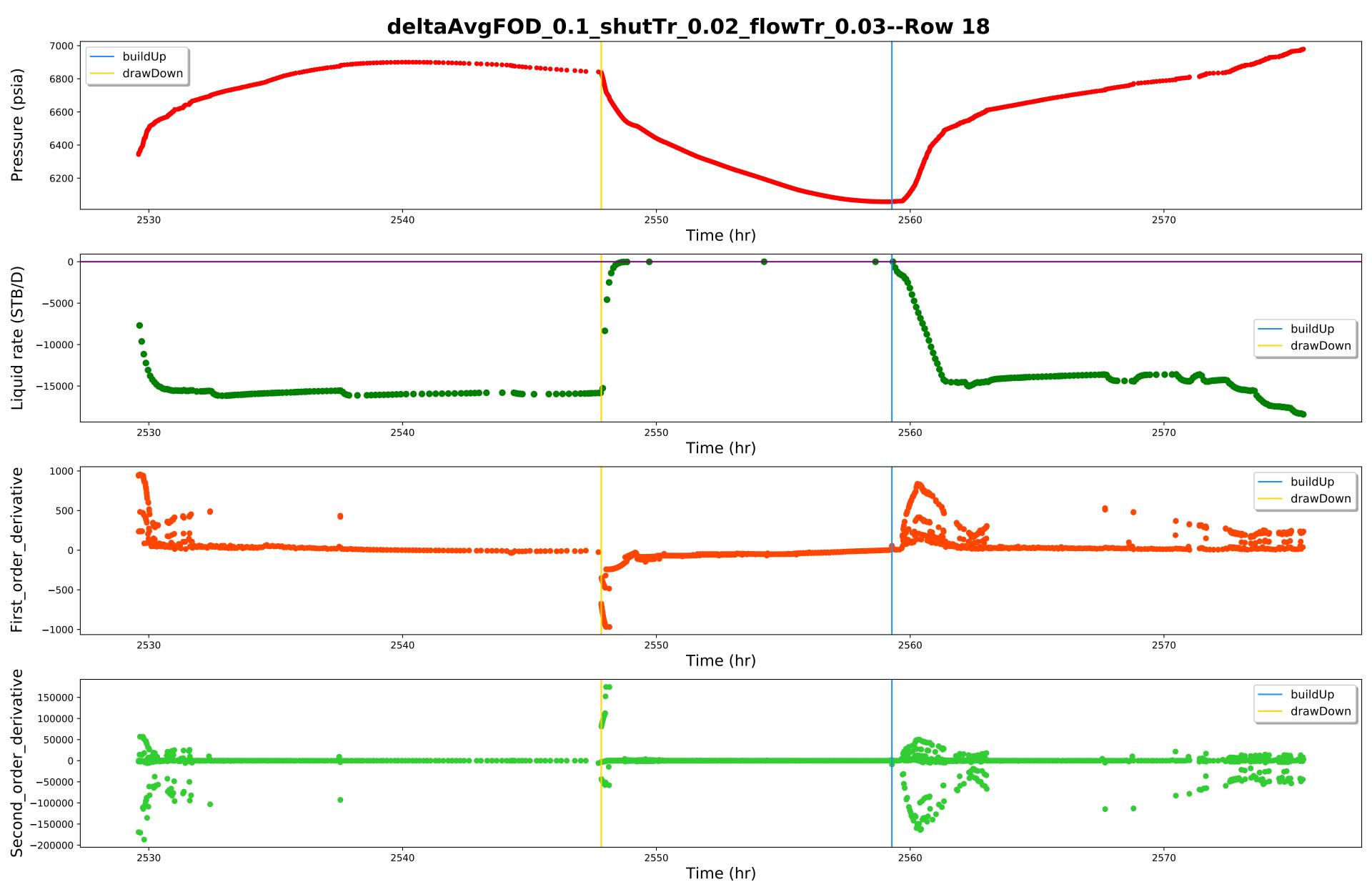


deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 14 buildUp drawDown Pressure (psia) Time (hr) Liquid rate (STB/D) -5000 -10000 -15000 buildUp draw Down-20000 Time (hr) First_order_derivative -250 -500 buildUp -750 drawDownTime (hr) Second_order_derivative buildUp drawDown -50000 -100000 Time (hr)

deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 15 drawDown Pressure (psia) Time (hr) Liquid rate (STB/D) -5000 -10000 -15000 drawDown -20000 Time (hr) First_order_derivative drawDown -200 -400 -600 -800 Time (hr) Second_order_derivative drawDown -50000 -100000 Time (hr)

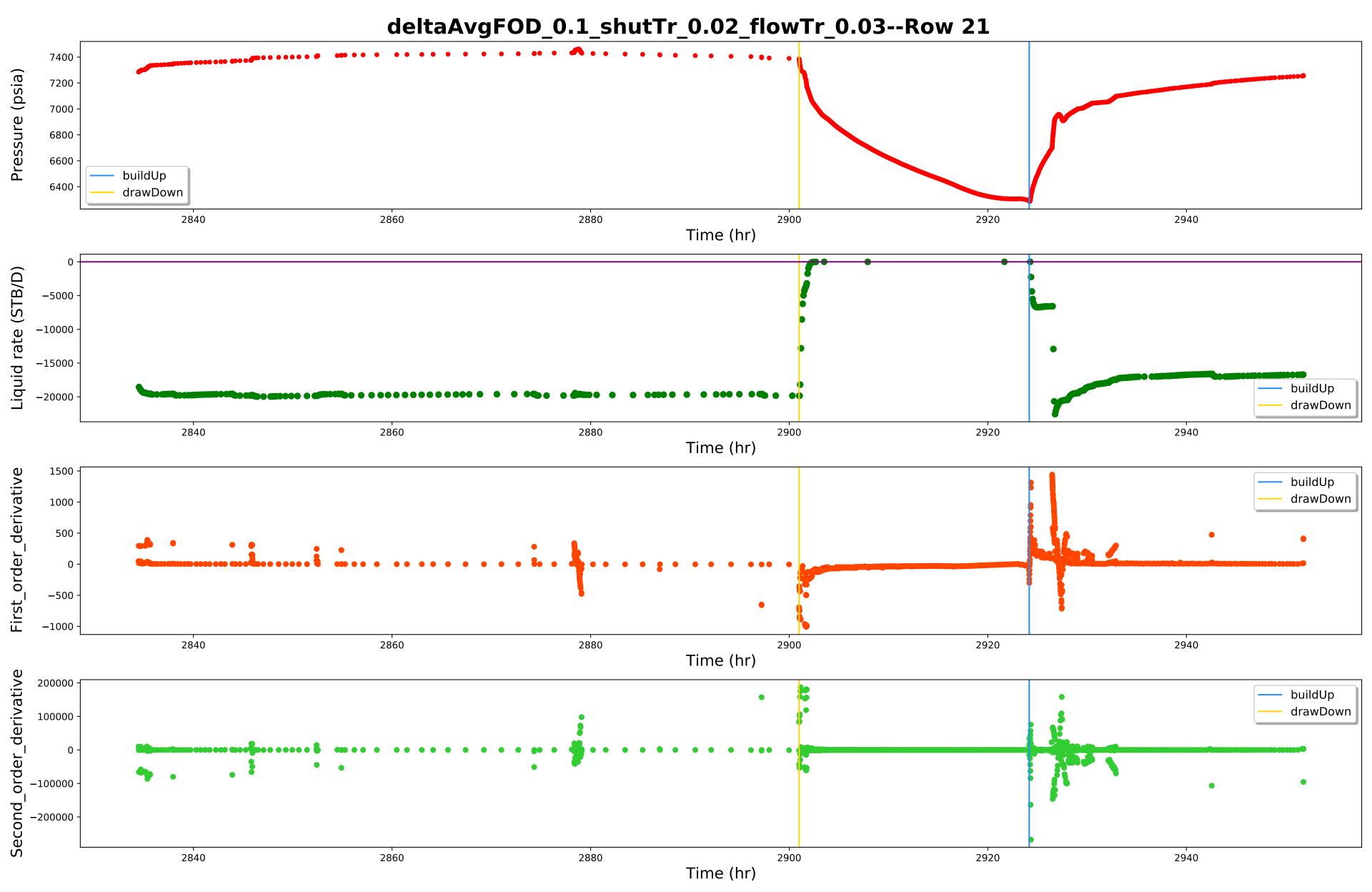


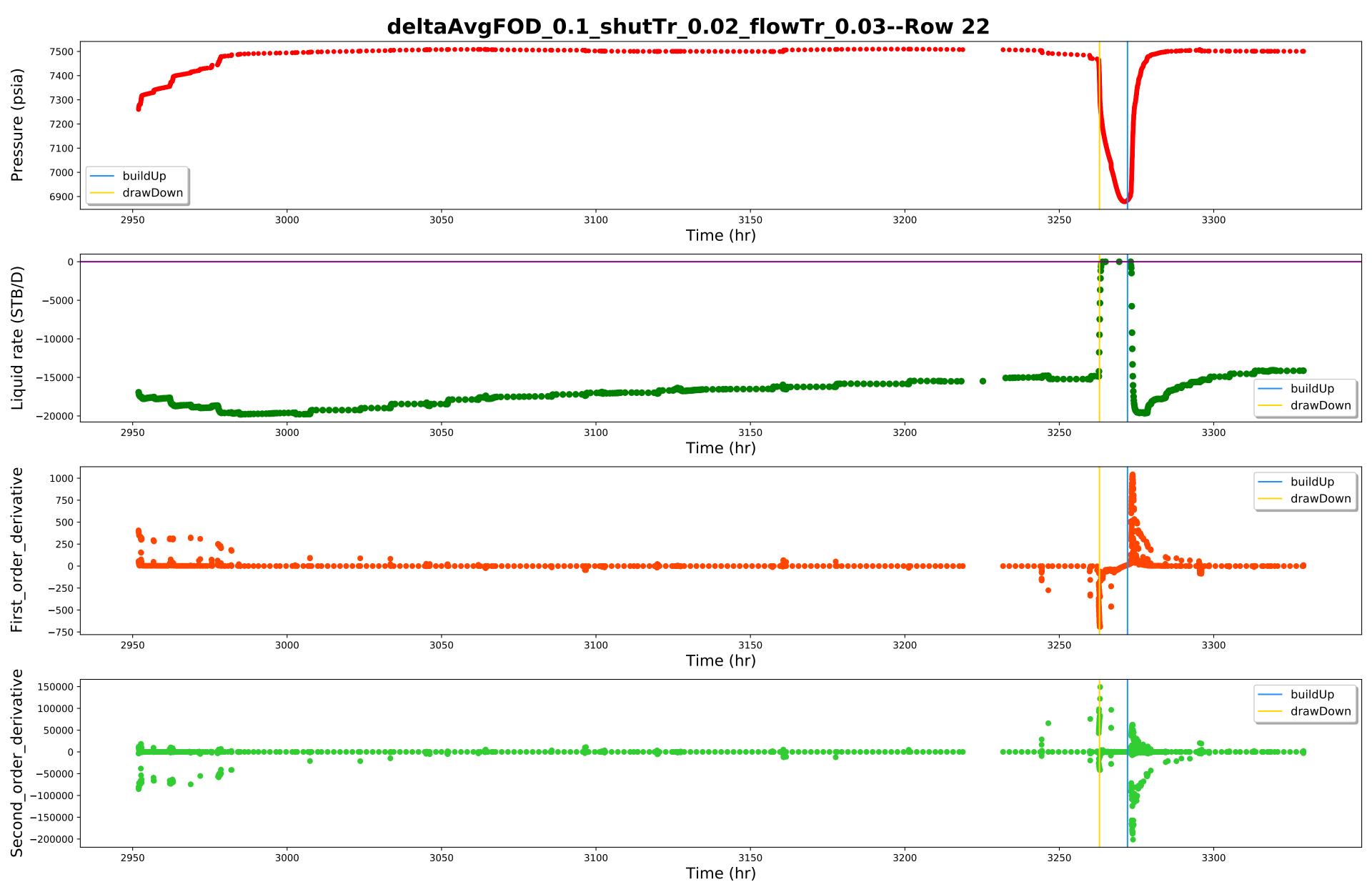
deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 17 buildUp Pressure (psia) draw DownTime (hr) Liquid rate (STB/D) -5000 buildUp -10000 drawDown -15000 -20000 Time (hr) First_order_derivative -500 buildUp -1000 drawDown Time (hr) Second_order_derivative buildUp drawDown-50000 -100000 Time (hr)

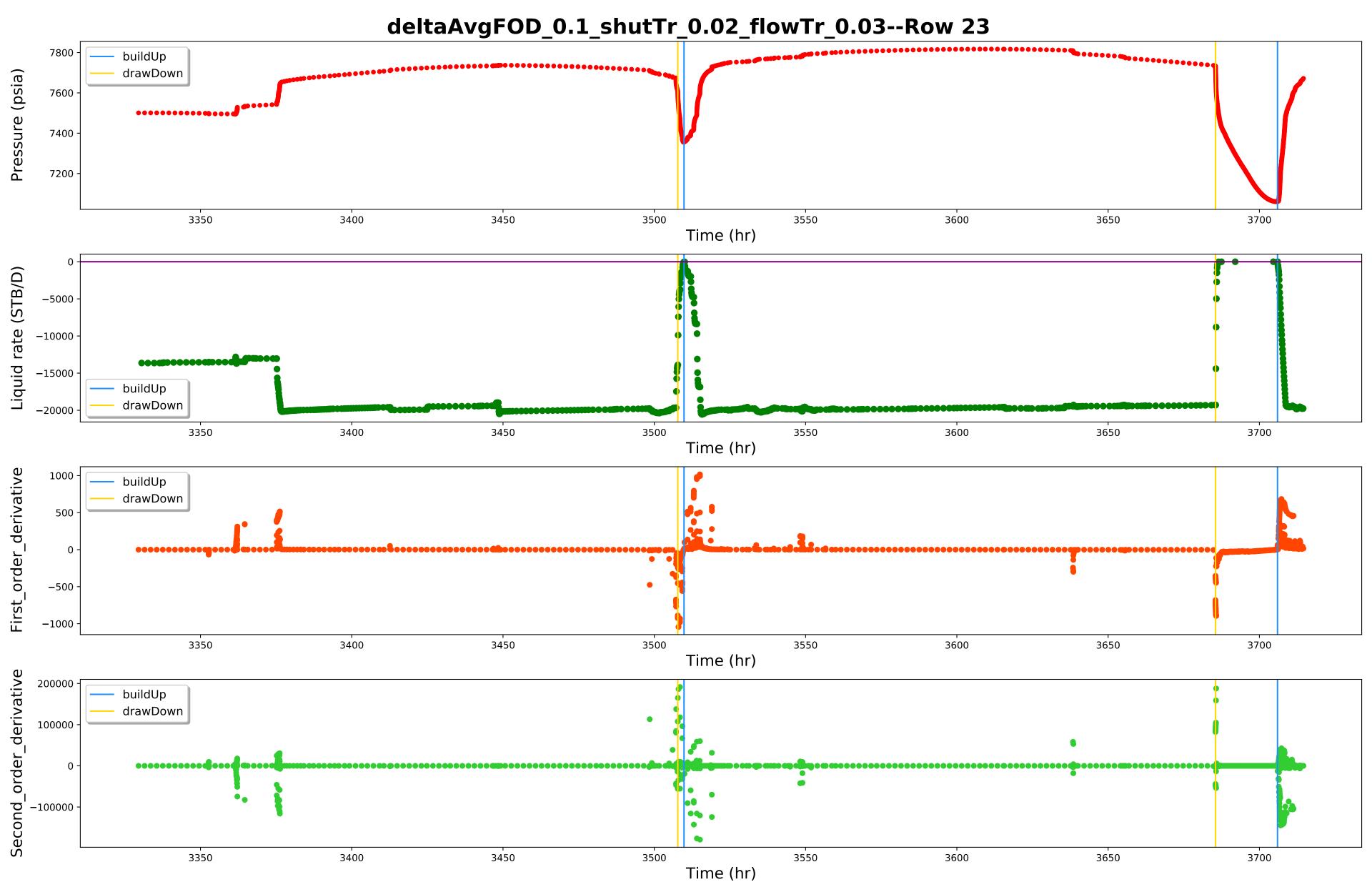


deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 19 buildUp drawDown Pressure (psia) Time (hr) Liquid rate (STB/D) -5000 buildUp -10000 drawDown -15000 Time (hr) First_order_derivative -500 buildUp drawDown -1000Time (hr) Second order derivative buildUp drawDown Time (hr)

deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 20 buildUp Pressure (psia) Time (hr) Liquid rate (STB/D) -5000 -10000 -15000 buildUp Time (hr) First_order_derivative buildUp Time (hr) Second order derivative - buildUp Time (hr)







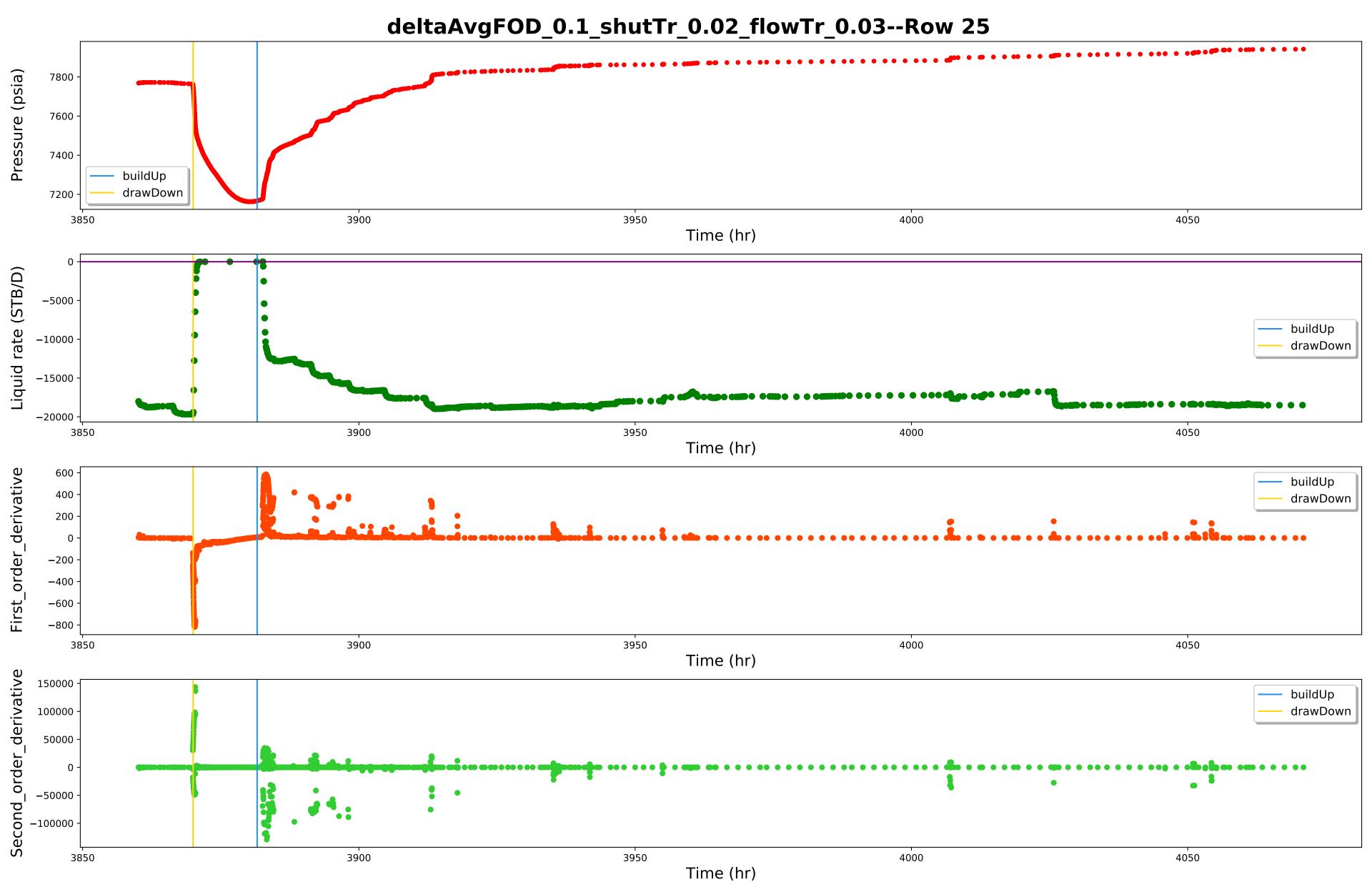
deltaAvgFOD_0.1_shutTr_0.02_flowTr_0.03--Row 24 Pressure (psia) buildUp drawDownTime (hr) Liquid rate (STB/D) -5000 buildUp -10000 drawDown -15000 -20000 Time (hr) First_order_derivative buildUp drawDown-250 -500 -750 Time (hr) Second order derivative

100000

-50000

-150000

-150000 buildUp drawDown Time (hr)



buildup:31, drawdown:31