

## 1. Open the event log

- [File] -> [Open log] or Ctrl + O
- Open sensor data by double-clicking any log items

The screenshot shows the Himalaya Logviewer application. The title bar indicates the log file path: D:/LogPearl/FromUser/SN0135/HISTOCOREPEARL\_Service\_0135112016\_20170120\_144316/HISTOCOREPEARL\_0135112016\_20170120.log. The interface is divided into several sections:

- Filter:** A list of log levels (Debug, Error, Info, Program, Scenario, Warning) with checkboxes. The 'Scenario' checkbox is checked.
- cont.:** A tree view showing the sequence of steps in the process, from Step [6] to Step [13].
- Log Table:** A table with columns: Time, Gap, Event, type, and Description. It contains multiple log entries, with the entry at 2017-01-20 01:19:57.548 (Event: 16846848, type: Debug, Description: Debug message: INFO: Stop Pump) highlighted in blue.
- Status Bar:** At the bottom, it shows 'sum: 0h:0m:0s'.

Annotations with arrows provide instructions on how to interact with the log data:

- A blue callout bubble with the text "click any items to highlight the first log item for the scenario" points to the 'Started processing' event in the log table.
- A blue callout bubble with the text "click any items to highlight the scenario in the navigation windows" points to the 'Step [6]' item in the 'cont.' tree view.
- A blue callout bubble with the text "double-click any itmes to show the sensor data curves near this period" points to the highlighted log entry at 2017-01-20 01:19:57.548.

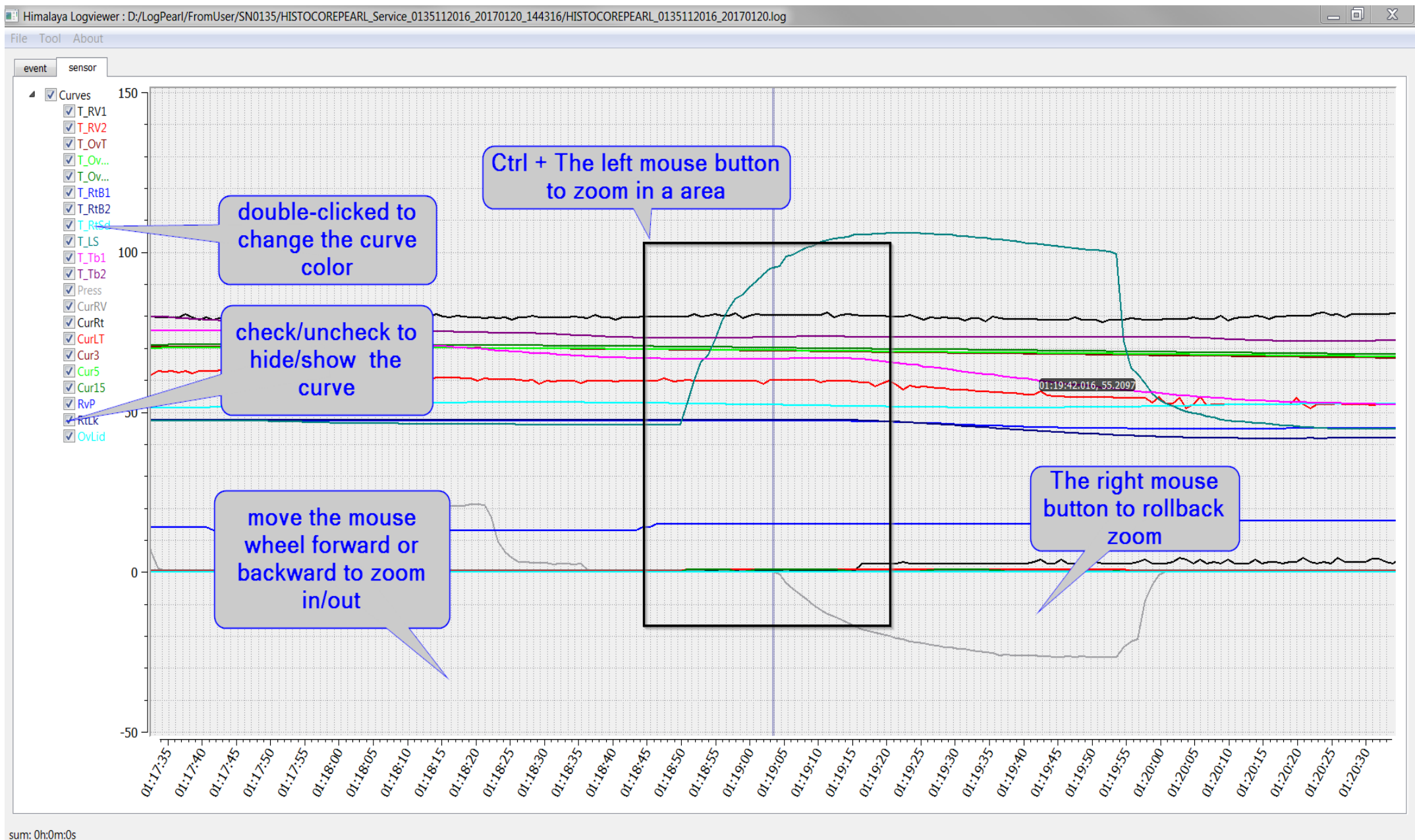
## 2. Check sensor data

### a. Zoom in

- ✧ mouse wheel: move backward
- ✧ Ctrl + left mouse button: press the Ctrl key and drag the left mouse button to specify the rectangle area that you want to zoom in

### b. Zoom out

- ✧ mouse wheel: move forward
- ✧ the right mouse button: press the right mouse button to rollback the curve size



### 3. find a log

[Tool] -> [Find] or Ctrl + F

File

Tool

About

Find

Ctrl+F

Save Curves

Ctrl+A

Analyse log

Ctrl+U

Unzip LPKG

Info

Program

Scenario

Warning

cont...

Step [6]

Start heating le...

Start heating le...

Started filling

Moving the rota...

Started processi...

Moving the rota...

Draining...

Moving the rota...

Step [7]

Start heating le...

Start heating le...

Started filling

Moving the rota...

Started processi...

Moving the rota...

Draining...

Moving the rota...

Step [8]

Start heating le...

Start heating le...

Started filling

Moving the rota...

Started processi...

Moving the rota...

Draining...

Moving the rota...

Step [9]

Step [10]

Step [11]

Step [12]

Step [13]

Cleaning Program

Time	Gap	Event	type	Description
2017-01-20 00:14:08.517	0h:0m:0s	16846848	Debug	Debug message: INFO: Start release pressure procedure
2017-01-20 00:14:08.517	0h:0m:0s	16846848	Debug	Debug message: INFO: Stop Pump
2017-01-20 00:14:08.540	0h:0m:0s	16846848	Debug	Debug message: INFO: Close Bath Valves
2017-01-20 00:14:08.619	0h:0m:0s	16846848	Debug	Debug message: INFO: Pressure released, exit now.
2017-01-20 00:14:08.720	0h:0m:0s	16846848	Debug	Debug message: ==CMD==:Release pressure.
2017-01-20 00:14:08.752	0h:0m:0s	16846848	Debug	Debug message: Program Processing(Soak) Process finish
2017-01-20 00:14:08.754	0h:0m:0s	67175214	Info	Set pressure to [30].
2017-01-20 00:14:09.016	0h:0m:0s	16846848	Debug	Debug message: INFO: Start release pressure procedure
2017-01-20 00:14:09.017	0h:0m:0s	16846848	Debug	Debug message: INFO: Stop Pump
2017-01-20 00:14:09.043	0h:0m:0s	16846848	Debug	Debug message: INFO: Close Bath Valves
2017-01-20 00:14:09.145	0h:0m:0s	16846848	Debug	Debug message: INFO: Pressure released, exit now.
2017-01-20 00:14:09.257	0h:0m:0s	16846848	Debug	Debug message: ==CMD==:Release pressure.
2017-01-20 00:14:09.258	0h:0m:0s	67174996	Info	Start retort([1]) heating in scenario:[245], the target temperature:[52].
2017-01-20 00:14:09.258	0h:0m:0s	67174996	Info	Start retort([0]) heating in scenario:[245], the target temperature:[47].
2017-01-20 00:14:09.262	0h:0m:0s	67174998	Info	Start rotary valve heating in scenario:[245], the target temperature:[80].
2017-01-20 00:14:09.263	0h:0m:0s	67174999	Info	Start LA system([1]) heating in scenario:[245], the target temperature:[80].
2017-01-20 00:14:09.263	0h:0m:0s	67174999	Info	Start LA system([2]) heating in scenario:[245], the target temperature:[80].
2017-01-20 00:14:09.263	0h:0m:0s	16846848	Debug	Debug message: ==CMD==:Set pressure [30]
2017-01-20 00:14:09.321	0h:0m:0s	16846848	Debug	Debug message: ==CMD==:RT StartTempCtrl, type:1, temp:52, slope:0, MaxTemp:112, P:6000, I:1000, D:80.
2017-01-20 00:14:09.387	0h:0m:0s	16846848	Debug	Debug message: ==CMD==:RT StartTempCtrl, type:0, temp:47, slope:0, MaxTemp:107, P:6000, I:30000, D:0.

input what you want to search

find

Filled succ

2017-01-20 00:17:22.664;67175222;Info;Filled successfully.

2017-01-20 01:19:53.795;67175222;Info;Filled successfully.

2017-01-20 02:23:16.038;67175222;Info;Filled successfully.

2017-01-20 03:25:53.640;67175222;Info;Filled successfully.

2017-01-20 04:29:11.914;67175222;Info;Filled successfully.

2017-01-20 05:38:54.369;67175222;Info;Filled successfully.

double-clicked to highlight the item in the log viewer and the navigation viewer

# 4. Position all errors on an instrument

[Tool] -> [Analyze log]

Find

Ctrl+F

Save Curves

Analyse log

Ctrl+A

Unzip LPKG

Ctrl+U

☒ Info
 ☒ Program
 ☒ Scenario
 ☒ Warning
 Shutdown
 Selftest

Time	Gap	Event	type	Description
2017-01-13 17:43:14.090	0h:0m:0s	513030001	Error	RotaryValve: Cannot get the original position!
2017-01-13 17:43:14.110	0h:0m:0s	513030001	Error	The instrument encountered the error 513030001 during scenario RS_RV_GetOriginalPositionAgain
2017-01-13 17:43:14.113	0h:0m:0s	17039361	Info	Pearl was switched to error state
2017-01-13 17:43:14.158	0h:0m:0s	67175185	Info	Scheduler enters
2017-01-13 17:43:14.158	0h:0m:0s	67174417	Info	Do recovery action
2017-01-13 17:43:14.649	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:43:14.649	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:43:15.155	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:15.386	0h:1m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:15.392	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:15.412	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:15.412	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:15.654	0h:0m:0s	513030001	Error	Resolved.
2017-01-13 17:44:15.654	0h:0m:0s	513030001	Error	Resolved.
2017-01-13 17:44:15.684	0h:0m:0s	67174417	Info	Do recovery action
2017-01-13 17:44:16.157	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:16.157	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:16.391	0h:0m:0s	16846848	Debug	Debug message:
2017-01-13 17:44:28.583	0h:0m:12s	513030001	Error	User acknowledged
2017-01-13 17:44:28.594	0h:0m:0s	67174417	Info	Do recovery action ALARM_-1.

list all errors ever happened on this instrument

double-click any errors to highlight in the log viewer and the navigation viewer

D:\LogPearl\FromUser\SN0135\HISTOCOREPEARL\_Service\_0135112016\_20170120\_144316

	Time	Event
1	2017-01-20 06:42:49.299	511040101 : EVENT_LA_Filling_TimeOut_2min
2	2017-01-20 05:38:04.750	511040101 : EVENT_LA_Filling_TimeOut_2min
3	2017-01-19 05:32:16.145	511040101 : EVENT_LA_Filling_TimeOut_2min
4	2017-01-19 04:14:30.353	511040101 : EVENT_LA_Filling_TimeOut_2min
5	2017-01-18 14:27:40.68	513030001 : EVENT_RV_Motor_CannotGet_OriginalPosition
6	2017-01-13 17:43:14.088	513030001 : EVENT_RV_Motor_CannotGet_OriginalPosition
7	2017-01-12 12:36:15.979	520070200 : EVENT_INTER_POWERFAILURE_AFTER_ERRHANDLING_FAILED
8	2017-01-12 12:36:00.513	520070200 : EVENT_INTER_POWERFAILURE_AFTER_ERRHANDLING_FAILED
9	2017-01-12 12:30:38.869	513030001 : EVENT_RV_Motor_CannotGet_OriginalPosition
10	2017-01-06 14:21:03.570	512020092 : EVENT_WaxBath_OvenCover_Status_Open
11	2017-01-02 14:38:44.050	512020092 : EVENT_WaxBath_OvenCover_Status_Open
12	2017-01-02 09:43:10.579	512020092 : EVENT_WaxBath_OvenCover_Status_Open
13	2016-12-30 13:27:38.616	511040101 : EVENT_LA_Filling_TimeOut_2min
14	2016-12-30 12:22:57.354	511040101 : EVENT_LA_Filling_TimeOut_2min
15	2016-12-29 17:55:06.324	520070400 : EVENT_INTER_ABORT

Ok