

Longwall Visual Analysis

New features



LVA New Features Summary – to LVA v7.39

Description

Summary of LVA new features, listed by released version and date, newest at top.

2025-04-08, LVA v7.39

- Menu profile bar at top right of screen can now show: Leg Pressures, DA Ram, or Both. Right-click to change, or see Configuration|General|Local|Gauges|Face profile.
- Added smoothing options to Scan Maps, LCM, Time of Day Maps.
- Added "Hybrid with pop-up" option to gauge styles "Gauge|Box|Hybrid|Hybrid with pop-up". Pop-up: a message window pops up when the gauge transitions into the red zone for the first time in several hours, click to close or it will auto-close after a time. Specify wait times in Configuration|General|Local|Gauges.
- Added "Print Flagged shields" button in Trending|Notes, to print the current Trending graph for all selected (flagged) shields sequentially.
- Added a "Play" button in main menu, LVA visible in Historical mode only. Click it to scroll through the data by incrementing a minute at a time.

2025-03-21, LVA v7.38 (prototype)

- Added separate colour setting for LAS2 (previously used LAS colours).
- Added "Convergence calculated from leg pressure changes" to Trending, Face Scan, 3D Images, Load Cycle Maps and Overlays.
- Added "Time from set to reaching a specified pressure" to 3D Images, Load Cycle Maps, and Overlays.
- Added "Continuous loading rates" to Trending.

2024-12-08, LVA v7.37c

- Fixed bug that sometimes prevented emails sending in v7.37

2024-10-20, LVA v7.37

- Added display of LAS2 if scanned by LVA_Datalink 5.47 or later.
- Added option in Overlays to "Reload image before draw".

2024-10-21, LVA v7.36

- Starting LVA from a network drive will issue a warning ... "You are starting LVA from a network drive", because this is not recommended.

2024-07-07, LVA v7.35

- New gauge: Hydraulic Health (also see "LVA Infosheet - Hydraulic Health.pdf").
- In Server Mode, form caption includes "Emails, Weblink, Image/http server" if any of these are active.

- Shield heights: plot H1-H3, but convergence/set/min heights are based on H2 only .[3D, LCM, Overlays]. Removed Conv etc based on H1, H3, (H1+H3)/2, because only H2 makes sense for Convergence.
- Add configurable Trending colours for System Pump 1-4, Hiset Pump 1-2, System Dump Valve, Hiset Dump Valve, Emulsion Tank.
- New option for 3D Colour Tables: [x] Use solid colours only (no gradients).
- 3D & LCM: Hydraulic Health – add separate 3D etc plotting for sub-categories (a=LowSetP, b=Leak, c=Hisets, d=NoYield, e=LowPr, f=MGvTG, g=LAS) including Histograms.
- 3D & LCM: added convergence options for [since set], [since 1st yield], [while shearer stopped] .

2024-06-17, LVA v7.34a

- Password required to change into or out of Server mode is hidden like "****".
- Convergence, where not specified, is now based on H2 (previously H1).
- LowSetP and Fast set-yld gauges: Affected shield numbers added to tooltip display.
- Gauge Rapid Set to Yield tooltip now like "25 shields reached Yield within 41 minutes" {previously like "41 minutes (average YT for fastest 25 shields)"}
- Gauges and Graphs [Trend, 3D, Heat maps] added "Copy tooltip text" option on right click.

2024-05-02, LVA v7.34

- Save backup zip file now includes "log" folder.

2024-03-20, LVA v7.33

- Server mode change names to "Server/Technical User/Typical User/Viewer User" Modes. Password required to change in/out of server; no pw otherwise. Contact LVA for pw.

2024-03-14, LVA v7.32

- Improvements to Overlays, higher resolution and better displays.
- Fixed screen flashing in 3D animation Top View.
- Changing user modes requires password (contact LVA for pw).
- Option to revert to startup screen and [selected mode] after inactivity.
- Option in 3D Images - Moving average across face of width [10] shields
- Fixed not correctly loading configuration files from version 7.18 or earlier.
- Option to display Shearer path in two colours depending whether target line data shows as good or bad/out of service.
- New Alert: High loading rate region > [5] bar/min across [10] shields.
- New Datalink scans for "Flipper Ram", displayed in 3D, ScanMaps, LCM .
- New single-point data in Trend, 3D side: SystemPump1-4, HisetPump1-2, SystemDumpValve, HisetDumpValve, EmulsionTank.

2024-02-06, LVA v7.31

- Added option to show Face Scan shields in opposite order to 3D etc (client request).

2023-12-14, LVA v7.30a

- Added showing "0" values of PSA (PosiSetActive) in 3D etc as "0.1" so it draws as a short bar rather than appearing as "no data".

2023-07-31, LVA v7.28

- Added WDI to 2D side panel on 3D graphs.
- Added "Hybrid" option to gauge style "Gauge|Box|Hybrid". Hybrid = Box if value>80, else Gauge.

2023-05-22, LVA v7.27b

- Added CRI to 2D side panel on 3D graphs.
- Added e.g. "5 shears in 1.5 days" to menu bar profile at top right of window.

2023-05-15, LVA v7.27a

- Improved Data Export can export multiple items to separate files at once.

2023-03-31, LVA v7.27

- Face scan: "Yield Count" now displays as a stack of dots, shown as MG or TG, or Avr[MG,TG] if both legs are displayed.
- Face Scan: optional fixed range for loading rates.
- Face Scan: Show text for shields above Yield Pressure, like "15 MG Legs > YP" or "12 shields > YP"
- Emails: Don't attach images if older than 10 minutes.
- Viewer mode: Layouts saved to Global network settings (all users see the same Layouts in Viewer mode).
- WDI & CRI Gauges: show the time they peaked during the past [8] hours.

2023-03-01, LVA v7.26c

- Face scan: Added "Yield Count" display.
- Alerts: Leaking legs, add MG/TG info to show affected shields like "MG: 3,5,7. TG: 6, 8, 10."
- 3D: Leaking legs, add MG/TG info to tooltip.
- Roof Variability gauge renamed "Face Variability".
- 3D Peaks: Use values rather than %. Added option to "Invert (valleys only)".

2023-02-27, LVA v7.26b

- Progress bar: change to increasing rather than decreasing.
- BDR alerts (Block detachment risk): Show all occurrences across the face, not just the first.
 - e.g. "12/02/2023 12:40 Block detachment risk: 20 shields, 5 shears. 0.82 shears/h. Shields 80-99, 126-150, 165-184, AvSetPr <400 bar, TWAP ↑-5 bar, LR ↑-5 bar/min"
- Face scan: MG & TG SetP & TWAP are displayed for each leg separately, but use the average if both legs are plotted together (previously always used the average).
- Face scan: Display number of legs below set pressure as text, e.g. "25 MG legs SetP < 290 bar".

2023-02-13, LVA v7.26

- Added Alerts | Block Detachment Risk (BDR) "impending loading conditions that may lead to fracturing ahead of the face" (client request).
- Added "LAS" to Load Cycle Maps.

2022-07-05, LVA v7.25a

- TimeOfDay maps: added FastSetToYield and WeightOnFace.

2022-07-05, LVA v7.25

- Fixed bug with sometimes not picking up new panel over network.

2022-01-19, LVA v7.24

- Added shield hydraulic health TARP to 3D and LCM.
- Add "Global settings have changed" menu item with drop-down option to Save/Restore/Clear.

2021-12-08, LVA v7.23a

- Backup current panel data - "File | Backup current panel to zip".

2021-09-15, LVA v7.22h

- Trend & Face Scan graph tooltips show "#" at the value closest to the mouse.
- Fixed minor bug with roof variability not displaying in Trending.

2021-08-16, LVA v7.22e

- Fixed LAS reporting in Alerts being off by 1 shield (S3 was reported as S2).

2021-08-12, LVA v7.22d

- Right-click to copy image, or “Copy data as table” for any 2D or 3D graph or heat map, and then paste into Excel.

2021-08-10, LVA v7.22c

- LCM Histograms: Added spike filter for pressures, heights & convergence.

2021-08-09, LVA v7.22a

- Additions to LCM Distributions and Histograms:
 - Number of shears is displayed in the page title.
 - Optionally exclude shields in cavities (e.g. exclude all shields with TWAP < [200] bar) from histograms and averages.
 - Optionally exclude shields at the gate ends, shown fainter to indicate they are excluded from averages and histograms.
 - Smoothing option, by fitting a polynomial across each point with n neighbours on each side, where n is the degree of smoothing, selectable from 2 to 5. It will do this for every shield across the face, for every shear.

2021-08-02, LVA v7.22

- Added Histograms to LCM (Load cycle maps).