



This document provides a description of the full layout view templates and interpretation view templates defined for the Sondex tools (in SondexTemplates.kvt) and the Schlumberger tools (in SchlumbergerTemplates.kvt) in Emeraude.

The full layout templates described here are made of a combination of different type of view templates:

- Automatic views, also visible individually under the Automatic views folder.
- Rate view templates, also visible individually under the Rate views folder.
- User view templates generated for one pass selected by the user, also visible individually under the User views folder.
- Interpretation view templates (for the active interpretation), also visible individually under the Interpretation views folder. This one is organized by type, and contains the PL reference and Match views, the PNL volume views, the MPT processing result views and the APERM views.
- Image view templates generated for one pass selected by the user, also visible individually under the Image views folder.
- Well view templates, also visible individually under the Well views folder.
- Depth, zones display, volume of fluids and well sketch view templates, also visible under the Other folder.

For more information about the Full Layout Templates and other types of templates, please refer to the online Help of Emeraude.

Figure 1 displays a series of depth profile plots for various locations: SPIN1, SPIN2, SPIN3, SPIN4, SPIN5, SPIN6, CFB, ILS, and SATROT. Each plot shows depth in feet (ft) on the y-axis (0 to 40) and position in rps (radians per second) on the x-axis. The plots show the depth of the water surface and the depth of the seabed. SPIN1 to SPIN6 show depths ranging from approximately 10 to 30 rps. CFB shows depths ranging from approximately 10 to 15 rps. ILS shows depths ranging from approximately 10 to 12 rps. SATROT shows depths ranging from approximately 10 to 360 rps.

SAT - V apparent

Call this full layout template to display the 6 SAT spinner velocities (VASPINxx), the SAT bearing (SATROT), a fullbore spinner velocity (VACFB) and an inline spinner velocity (VAILS):

Depth	VASPIN1	VASPIN2	VASPIN3	VASPIN4	VASPIN5	VASPIN6	VACFB	VAILS	SATROT
ft	-20 ft/min 260	-30 ft/min 120	-30 ft/min 120	-50 ft/min 110	-20 ft/min 180	-1200 ft/min 200	-20 ft/min 35	-50 ft/min 110	0 ° 360

Interpretation match

Call this full layout template to display the curves selected for the interpretation (Interpretation # x), depth, zone display (Z), phase holdups match views, mixture velocity match view, and phase rates match views. It is also possible to display a temperature match view, a density match view, a capacitance match view and phase velocities match views when these measures are available. In the example below, the interpretation relies on the inputs of a density, a water holdup, a gas holdup, the phase rates and a mixture velocity.

QT MAPS Interpretation	Depth	Z	Density match	Water holdup match	Gas holdup match	Mixture velocity match	Oil rate match	Water rate match	Gas rate match
680PRES QT2.MAPS [psia] 780 QG_MAPS QT2.MAPS [B/D] DENR QT2.MAPS [g/cc]	ft		DENR QT2.MAPS [g/cc]	0 YW_MAPS QT2.MAPS -1 0 YW_MAPSZ->QT2.MAPS-1	0 YG_MAPS QT2.MAPS -1 0 YG_MAPSZ->QT2.MAPS-1	VT_SAT QT2.MAPS [ft/min] ...	QOZT-> QT2.MAPS [B/D] QO_MAPS QT2.MAPS [B/D]	QWZT-> QT2.MAPS [B/D] ...	QG_MAPS QT2.MAPS [B/D] QGZT-> QT2.MAPS [B/D]

MPT processing

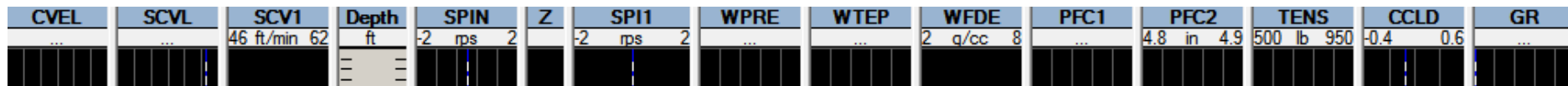
Call this full layout template to display the curves obtained from the processing of the MAPS tool: depth, zone display (Z), MPT errors, MPT constraints, phase holdups, mixture velocity and phase rates.

Depth	Z	MPT errors I1	Constraints	YW_MAPS	YG_MAPS	VT_MAPS	QW_MAPS	QG_MAPS	QO_MAPS
ft		-1 RATMN 1 -1 VASPIN 1		0 1	0 1	-100 ft/min 140	-1200 B/D 1600	-1200 B/D 1600	-1200 B/D 1600

II. Schlumberger Full Layout Templates

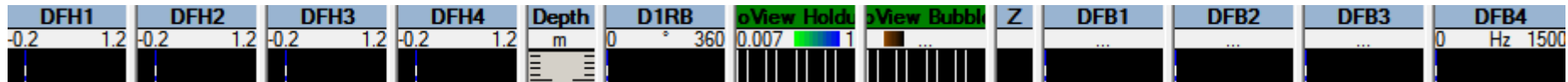
PSP Basic Sensors

Call this full layout template to display the unmemorized cable velocity (CVEL), memorized PFCS cable velocity (SCVL), memorized PILS cable velocity (SCV1), depth, PFCS spinner (SPIN), zones display, CFS/PILS spinner (SPI1), PBMS pressure (WPRE) and temperature (WTEP), PGMS density (WFDE), PFCS-X (PFC1) and PFCS-Y (PFC2) calipers, cable tension (TENS), PBMS CCL (CCLD) and gamma ray (GR).



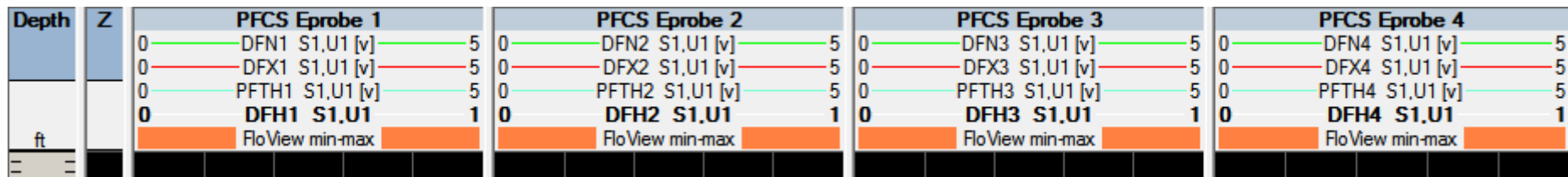
PFCS Holdup and Bubble Count

Call this full layout template to display the 4 PFCS holdup sensors (DFHx), depth, PFCS probe 1 Relative bearing (D1RB), FloView Holdup image, FloView Bubbles image, zones display (Z) and the 4 PFCS Bubble sensors (DFBx).



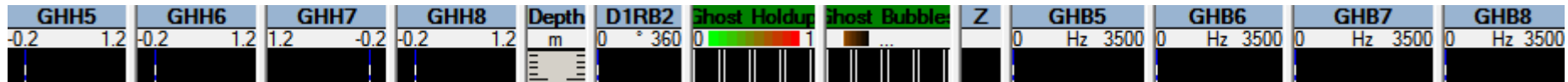
PFCS Probe LQC

Call this full layout template to display per pass and for the 4 electrical probes, the non water baseline (DFNx), water baseline (DFXx), the dynamic threshold (PFTH1x), the computed water holdup (DFHx) and the FloView minimum (hydrocarbon continuous phase) and maximum (water continuous phase).



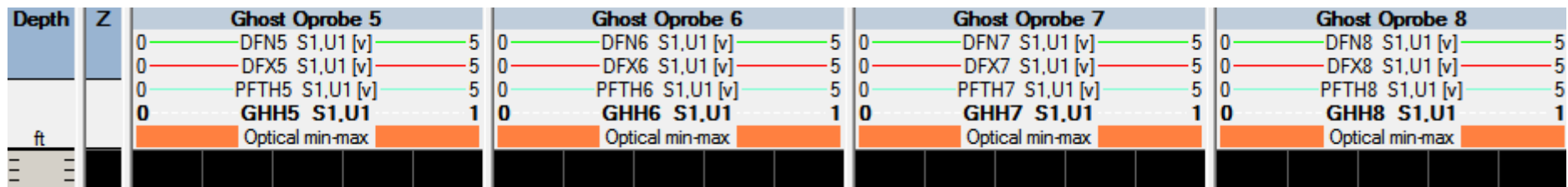
GHOST Holdup and Bubble Count

Call this full layout template to display the 4 GHOST holdup sensors (GHHx), depth, GHOST probe 5 Relative bearing (D1RB2), GHOST Holdup image, GHOST Bubbles image, zones display (Z) and the 4 GHOST Bubble sensors (GHBx).



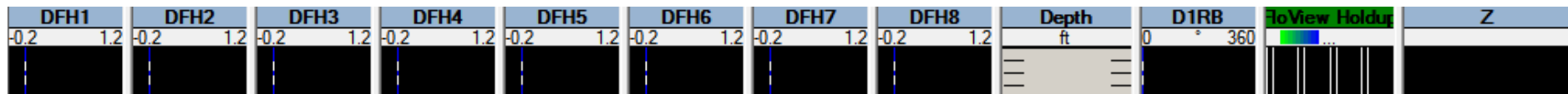
GHOST Probe LQC

Call this full layout template to display per pass and for the 4 optical probes, the non gas baseline (DFNx), gas baseline (DFXx), the dynamic threshold (PFTHx), the computed gas holdup (GHHx) and the optical minimum (water gas plug slug flow) and maximum (gas continuous phase).



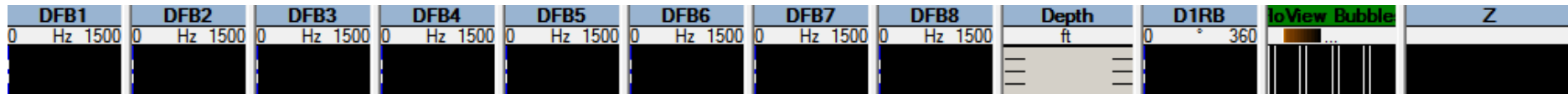
Dual DEFT Holdups

Call this full layout template to display the 8 holdup sensors of a DEFT-PFCS combination (DFHx), depth, PFCS probe 1 Relative bearing (D1RB), FloView holdup image and the zone display (Z).



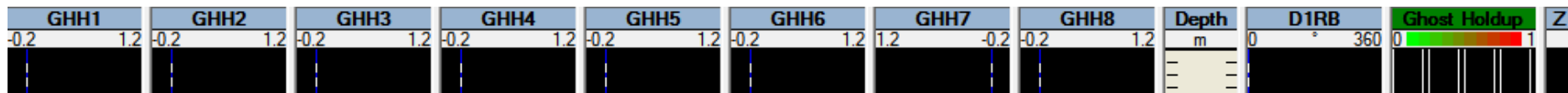
Dual DEFT Bubbles

Call this full layout template to display the 8 bubble sensors of a DEFT-PFCS combination (DFBx), depth, PFCS probe 1 Relative bearing (D1RB), FloView bubbles image and the zone display (Z).



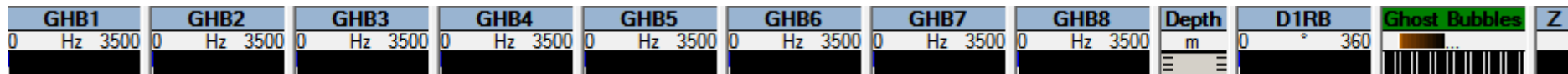
Dual GHOST Holdups

Call this full layout template to display the 8 holdup sensors of a GHOST-GHOST combination (GHHx), depth, PFCS probe 1 Relative bearing (D1RB), GHOST holdup image and the zone display (Z).



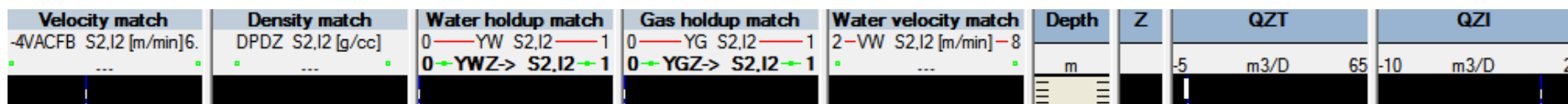
Dual GHOST Bubbles

Call this full layout template to display the 8 bubble sensors of a GHOST-GHOST combination (GHBx), depth, PFCS probe 1 Relative bearing (D1RB), GHOST bubbles image and the zone display (Z).



PSP Reconstruction Quality

Call this full layout template to display the velocity, the density, the water holdup, the gas holdup and the water velocity match, depth, zone display (Z), total flow rate (QZT) and zonal inflow (QZI).



FSI Spinner View

Call this full layout template to display the PBMS gamma ray (GR), depth, zone display (Z), FSI Relative bearing (RB_FSI), FSI caliper (CALI_FSI), cable tension (TENS), FSI cable velocity (CVEL_FSI), the 5 FSI spinners rps readings (SPIFx_FSI), TVD and deviation, PBMS temperature (WTEP) and pressure (WPRE).

GR	Depth	Z	RB_FSI	CALI_FSI	TENS	CVEL_FSI	SPIF0_FSI	SPIF1_FSI	SPIF2_FSI	SPIF3_FSI	SPIF4_FSI	TVD and DEVI	WTEP	WPRE
...	ft		-30 ° 30	4.4 in 5.2	...	...	-2 rps 28	-2 rps 22	-2 rps 22	-2 rps 20	-2 rps 20	...	...	...

FSI Spinner Velocity View

Call this full layout template to display the PBMS gamma ray (GR), depth, zone display (Z) and the 5 FSI spinner velocities (VASPIFx_FSI).

GR	Depth	Z	VASPIF0_FSI	VASPIF1_FSI	VASPIF2_FSI	VASPIF3_FSI	VASPIF4_FSI
0 GAPI 150	ft		-50 ft/min 500	-50 ft/min 500	-50 ft/min 500	-20 ft/min 280	-50 ft/min 350

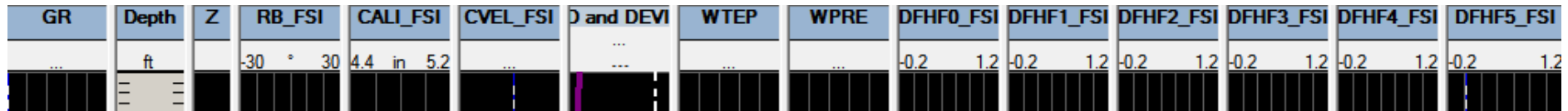
FSI Spinner LQC View

Call this full layout template to display per pass and for the 5 FSI spinners, the minimum (SPMNx) and maximum (SPMXx) spinner voltage, the first (SPTH1), second (SPTH2) and third (SPTH3) downhole thresholds and the rps readings (SPIFx_FSI).

Depth	Z	Spinner 0	Spinner 1	Spinner 2	Spinner 3	Spinner 4
		0 — SPMN0_FSI S1,U1 [v] — 5	0 — SPMN1_FSI S1,U1 [v] — 5	0 — SPMN2_FSI S1,U1 [v] — 5	0 — SPMN3_FSI S1,U1 [v] — 5	0 — SPMN4_FSI S1,U1 [v] — 5
		0 — SPMX0_FSI S1,U1 [v] — 5	0 — SPMX1_FSI S1,U1 [v] — 5	0 — SPMX2_FSI S1,U1 [v] — 5	0 — SPMX3_FSI S1,U1 [v] — 5	0 — SPMX4_FSI S1,U1 [v] — 5
		0 — SPTH1 S1,U1 [v] — 5	0 — SPTH1 S1,U1 [v] — 5	0 — SPTH1 S1,U1 [v] — 5	0 — SPTH1 S1,U1 [v] — 5	0 — SPTH1 S1,U1 [v] — 5
		0 — SPTH2 S1,U1 [v] — 5	0 — SPTH2 S1,U1 [v] — 5	0 — SPTH2 S1,U1 [v] — 5	0 — SPTH2 S1,U1 [v] — 5	0 — SPTH2 S1,U1 [v] — 5
		0 — SPTH3 S1,U1 [v] — 5	0 — SPTH3 S1,U1 [v] — 5	0 — SPTH3 S1,U1 [v] — 5	0 — SPTH3 S1,U1 [v] — 5	0 — SPTH3 S1,U1 [v] — 5
ft		-2 SPIF0_FSI S1,U1 [rps] 24	-2 SPIF1_FSI S1,U1 [rps] 20	-2 SPIF2_FSI S1,U1 [rps] 20	-2 SPIF3_FSI S1,U1 [rps] 16	-2 SPIF4_FSI S1,U1 [rps] 16

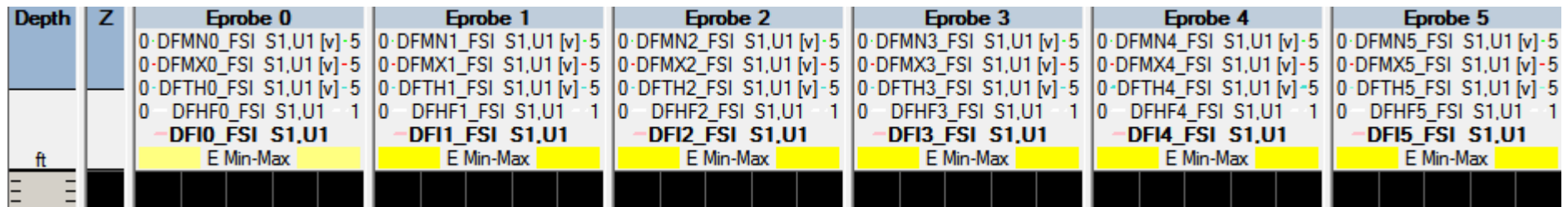
FSI Electrical Probe View

Call this full layout template to display the PBMS gamma ray (GR), depth, zone display (Z), FSI Relative bearing (RB_FSI), FSI caliper (CALI_FSI), TVD and deviation, PBMS temperature (WTEP) and pressure (WPRE) and the 6 FSI electrical probes (DFHFX_FSI).



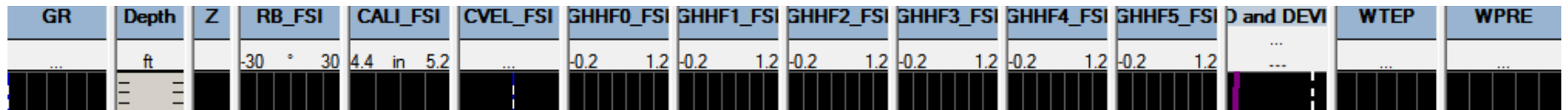
FSI Electrical Probe LQC

Call this full layout template to display per pass and for the 6 electrical probes, the non water baseline (DFMNx_FSI), water baseline (DFMXx_FSI), the dynamic threshold (DFTHx_FSI), the computed water holdup (DFHFx_FSI), the electrical probe downhole impedance (DFIx_FSI) and the FloView minimum (hydrocarbon continuous phase) and maximum (water continuous phase).



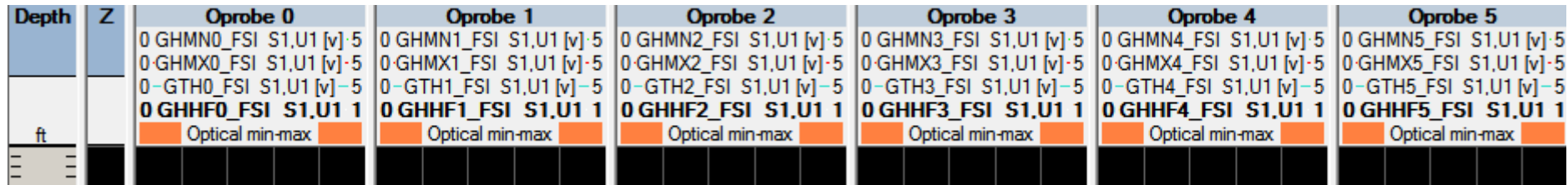
FSI Optical Probe View

Call this full layout template to display the PBMS gamma ray (GR), depth, zone display (Z), FSI Relative bearing (RB_FSI), FSI caliper (CALI_FSI), FSI cable velocity (CVEL_FSI), the 6 FSI optical probes (GHHFx_FSI), TVD and deviation, PBMS temperature (WTEP) and pressure (WPRE).



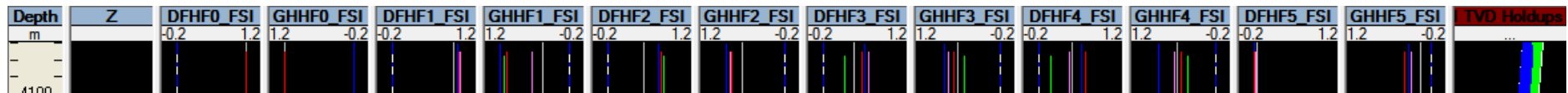
FSI Optical Probe LQC

Call this full layout template to display per pass and for the 6 optical probes, the non gas baseline (GHMNx_FSI), gas baseline (GHMXx_FSI), the dynamic threshold (GTHx_FSI), the computed gas holdup (GHHFx_FSI) and the optical minimum (water gas plug slug flow) and maximum (gas continuous phase).



Shale Gas Holdup

Call this full layout template for shale gas wells as it shows the FSI gas and water holdup probes on reversed scales for quick quality control.



FSI Interpretation View

Call this full layout template to display the water, oil and gas rate match, depth, zone display (Z), FSI reconstructed holdup image view, FSI reconstructed velocity image view, a well view with the FSI holdups (FSI TVD holdups), total flow rate (QZT) and zonal inflow (QZI).



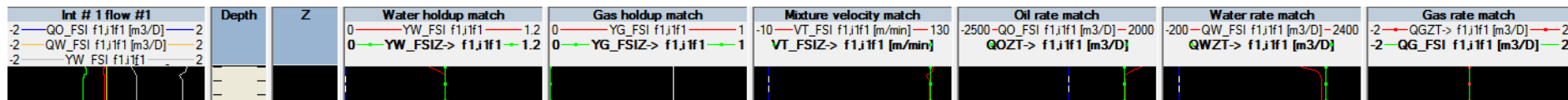
TPHL Processing

Call this full layout template to display the TPHL saturations, depth, well sketch, zone display (Z), TPHL holdup, a well view with the THPHL holdups (TPHL TVD holdups), NCOR, FCOR and NICR reconstruction views.



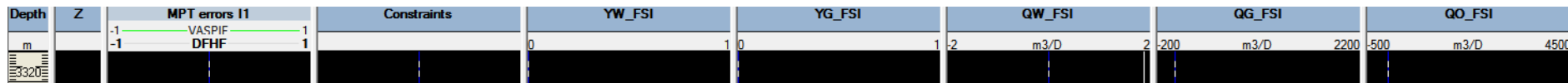
Interpretation Match

Call this full layout template to display the curves selected for the interpretation (Interpretation # x), depth, zone display (Z), phase holdups match views, mixture velocity match view, phase velocities match views and phase rates match views. It is also possible to display a temperature match view, a density match view and a capacitance match view when these measures are available. In the example below, the interpretation relies on the inputs of a water holdup, a gas holdup, the phase rates and the mixture velocity.



MPT processing

Call this full layout template to display the curves obtained from the processing of the FSI, the GHOST or the PFCS tool: depth, zone display (Z), MPT errors, MPT constraints. With a FSI tool, generating the phase holdups and phase rates, one obtains:



Steam Quality

Call this full layout template to display the depth, zone display (Z), the well sketch, the steam MFR (Mass Flow Rate) and the steam quality.

Steam Quality LQC

Call this full layout template to display the steam pressure and temperature LQC, the depth, zone display (Z), the well sketch, the water and steam densities, the VPCF for steam and the superficial velocity of water.