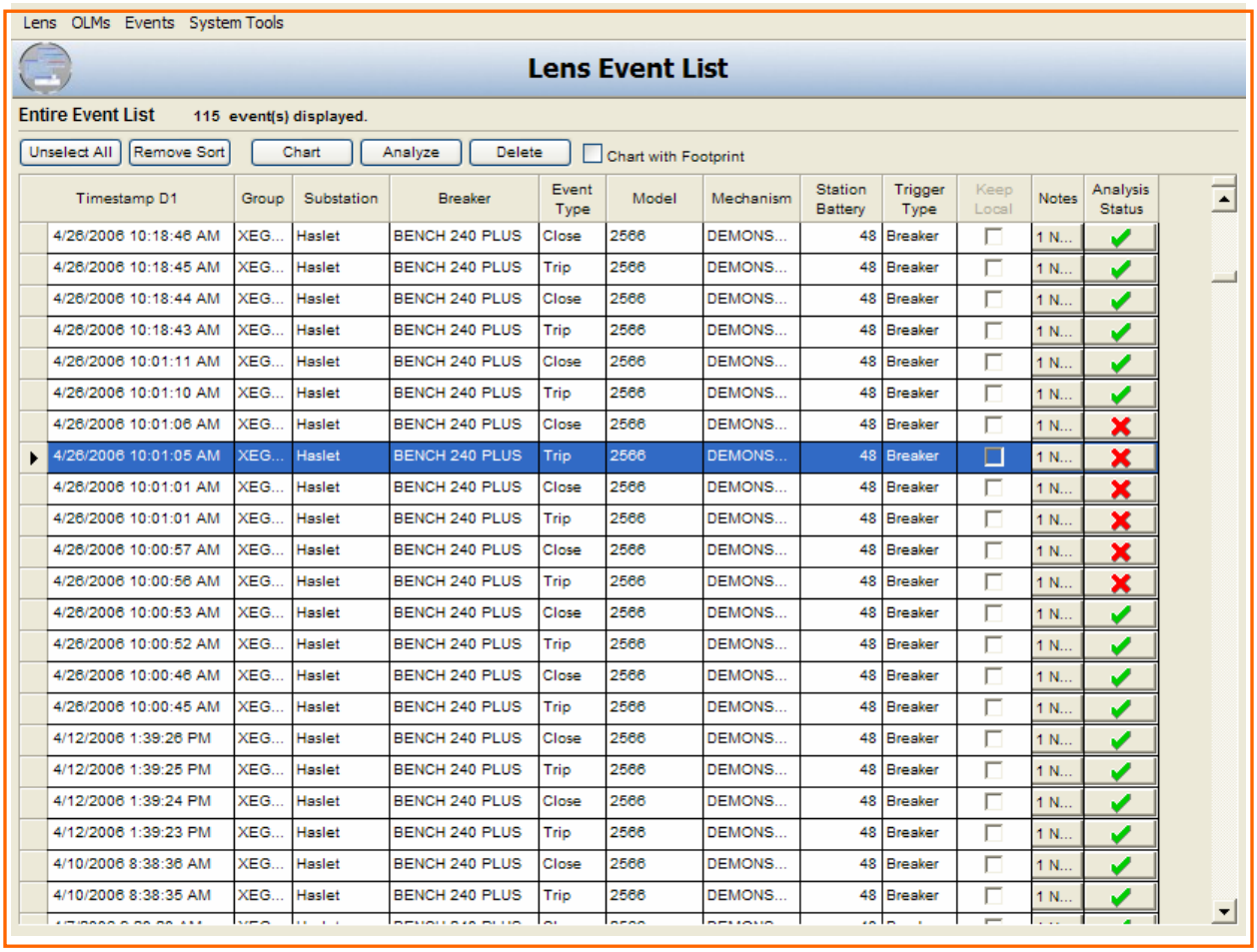
This is a series of screen captures and associated explanations intended to provide a brief introduction to the Analysis Engine. The engine compares data captured during a defined event against seventy (plus) programmable settings. The results are subsequently displayed in formats that range from a simple green check or red “x” to specific metrics.

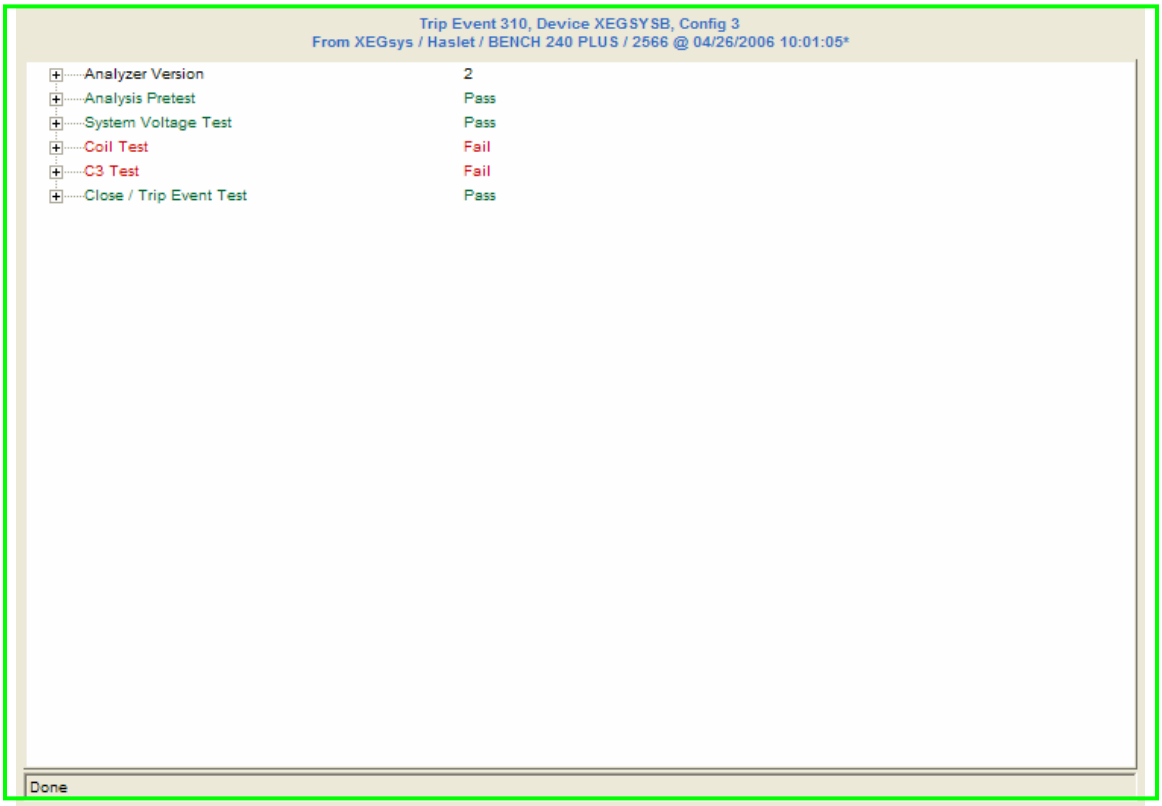


Timestamp D1	Group	Substation	Breaker	Event Type	Model	Mechanism	Station Battery	Trigger Type	Keep Local	Notes	Analysis Status
4/26/2006 10:18:46 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:18:45 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:18:44 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:18:43 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:01:11 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:01:10 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:01:06 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:01:05 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:01:01 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:01:01 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:00:57 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:00:56 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✗
4/26/2006 10:00:53 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:00:52 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:00:46 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/26/2006 10:00:45 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/12/2006 1:39:26 PM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/12/2006 1:39:25 PM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/12/2006 1:39:24 PM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/12/2006 1:39:23 PM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓
4/10/2006 8:38:36 AM	XEG...	Haslet	BENCH 240 PLUS	Close	2566	DEMONS...	48	Breaker		1 N...	✓
4/10/2006 8:38:35 AM	XEG...	Haslet	BENCH 240 PLUS	Trip	2566	DEMONS...	48	Breaker		1 N...	✓

Fig. 1

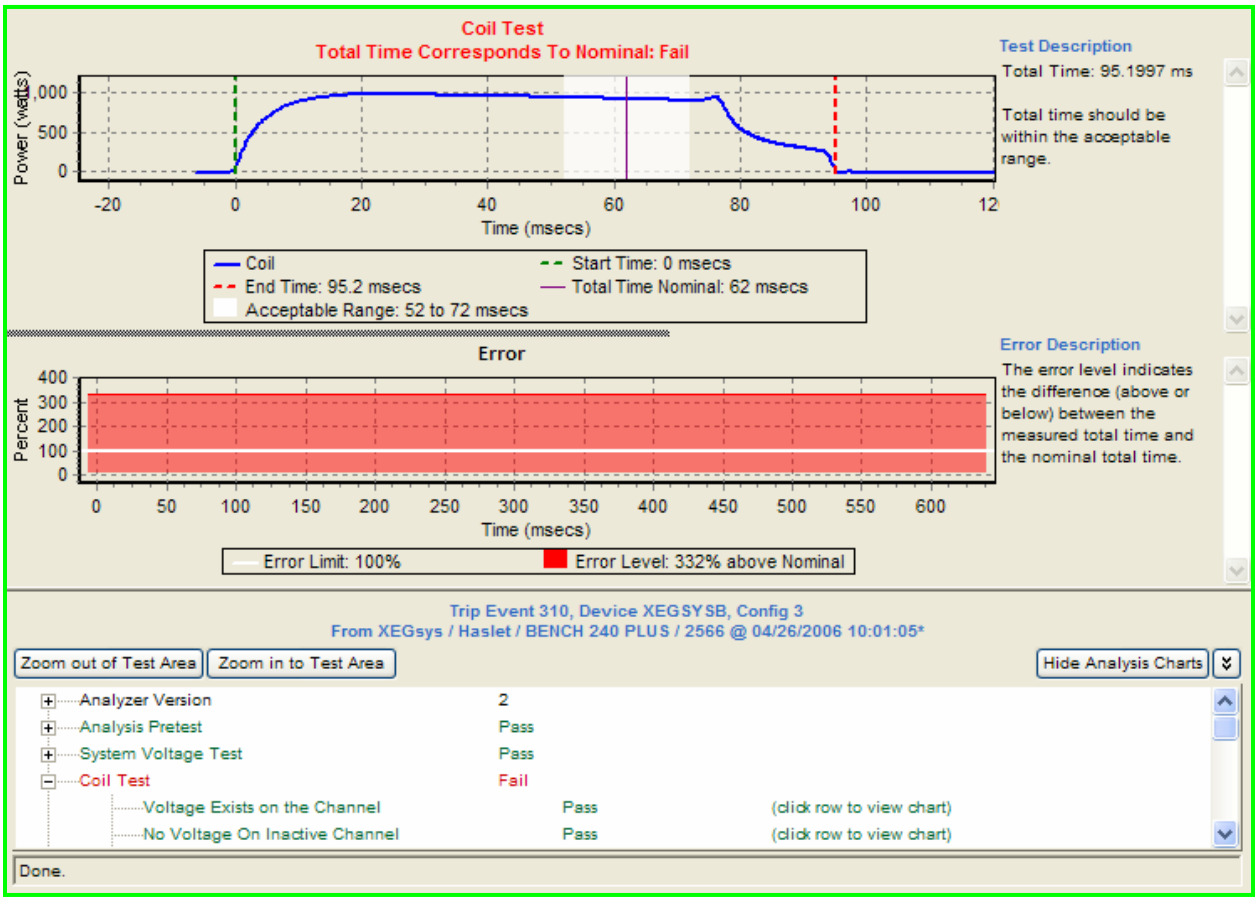
Represented in Figure 1, above, is a typical “Lens Event List.” Please notice on the right side is a column of green checks and red x’es associated with each event captured. Typically, a captured event will first be logged into the listing with a large blue question mark (**?**) in the “Analysis Status” column. The question mark indicates that analysis has not been requested. After one or more events have been highlighted, the Analysis button is engaged and the operation is begun. On completion, the results column will show a green check mark indicating all tests passed, or a red letter x indicating one or more test failures.

The next screen capture is associated with the actual event highlighted above. It is a failed trip event that occurred under controlled conditions on a specific circuit breaker in our Haslet, Texas Lab.



As shown, the first indication of failure is the Coil Test, since it is displayed in red.

By further expansion, we see there are problems in the areas of Total Time, Unlatch Time and Activity Area…



We continue to drill down into the details by clicking the indicated space to the right of the “fail” notice in the previous graph. The above graph shows the parameters and tolerances that were violated in the failing analysis. In this specific case the graphs show the trip coil/armature did not complete operation within the specified operational window. Again, in this instance the PASS parameters were set to operate nominally at 62msecs. Also shown is the acceptable range of 52 to 72 msecs. Please note the information is available both graphically and statistically.

In order to continue the drill down, the lower portion of the screen provides a direct path the next analysis item on the test listing.