## LSPI Matrix Test Status August 10, 2016

All tests on stand B1 were run with 2016 hardware. The other stands in the matrix were configured with 2014 hardware. All B1 tests will be rerun on 2014 hardware shortly. It was determined that all stand G2 runs exhibited coolant flow control problems. The lab has agreed to rerun all matrix tests.

Data can be retrieved at: <a href="ftp://ftp.astmtmc.cmu.edu/refdata/gas/lspi/data/ltms.csv">ftp://ftp.astmtmc.cmu.edu/refdata/gas/lspi/data/ltms.csv</a>

The field COM2 will identify the test as a precision matrix test with a value of "MATRIX".

Test Length ~1 day/test

Matrix Completion: August 29, 2016

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## **LSPI Matrix Test Status**

Run Order	B 1	G 1	G 2	A 1	A 2
1	222 114968-LSPI 2016 Hardware 2014 Hardware to be run	220 114954-LSPI Coolant Thermocouple Cal. Out 220 116222-LSPI	222 114960-LSPI Coolant Flow Control Problems 222 118888-LSPI	220 116220-LSPI	221 114973-LSPI
2	220 114962-LSPI 2016 Hardware 2014 Hardware to be run	221 114956-LSPI Coolant Thermocouple Cal. Out 221 114957-LSPI	Rerun in progress 221 114955-LSPI  Rerun Needed	222 114976-LSPI	221 114974-LSPI
3	220 114963-LSPI 2016 Hardware 2014 Hardware to be run	221 114958-LSPI	220 116223-LSPI Rerun Needed	222 114978-LSPI	222 114977-LSPI
4	221 114965-LSPI 2016 Hardware 2014 Hardware to be run	222 114961-LSPI	220 117631-LSPI Rerun Needed	221 114975-LSPI	220 116959-LSPI

✓ Indicates Task Force has reviewed operational data and found the test to be operationally valid.



Test Reported Invalid

			Average	
			Valid	
		Lab	Pre-Ignition	
Oil	TestKey	Stand	Events	Comment
220(5W30) LEO	116220-LSPI	A1	0.8	
	116222-LSPI	G1	0.8	
	116223-LSPI	G2	2.2	Coolant Flow Control Problems
	114962-LSPI	B1	0.5	2016 Hardware
	117631-LSPI	G2	5.8	Coolant Flow Control Problems
	114963-LSPI	B1	0.0	2016 Hardware
	116959-LSPI	A2	0.5	
221(0W16) MEO	114973-LSPI	A2	16.8	
	114974-LSPI	A2	11.8	
	114955-LSPI	G2	13.0	Coolant Flow Control Problems
	114975-LSPI	A1	10.5	
	114957-LSPI	G1	11.2	
	114958-LSPI	G1	9.2	
	114965-LSPI	B1	6.5	2016 Hardware
222 (10W30) HEO	114960-LSPI	G2	21.5	Coolant Flow Control Problems
	114976-LSPI	A1	25.8	
	114978-LSPI	A1	19.8	
	114968-LSPI	B1	12.8	2016 Hardware
	114977-LSPI	A2	19.2	
	114961-LSPI	G1	17.0	

If there are any questions please let me know.

Best regards, Frank

## Frank Farber

ftp://ftp.astmtmc.cmu.edu/docs/gas/GF6Matrix/cwt/20160810LSPIMatrixTestStatus.pdf