

## Sequence IVB Matrix Update

25 of the 30 tests have been reported to the TMC. The data is posted at:

<http://www.astmtmc.cmu.edu/ftp/refdata/gas/ivb/data/>

The field COM4 will identify the test as a precision matrix test with a value of "MATRIX2".

Oils: 300 (5W-30), 1011 (0W-16), 1012(5W-20)

Test length: 200 h /~9 days Estimated matrix completion: 12/16/17

If there are any questions please let me know.

Best regards,

Rich

Rich Grundza

<http://www.astmtmc.cmu.edu/ftp/docs/gas/gf6matrix/StatusReports/IVB/20180108IVBMatrixStatus.pdf>

Run order	B1-1	B1-2	B1-3	A-1	A-2	F-1	G-1	E-1
1	1012 127173-IVB	300 129759-IVB	1011 125879-IVB	300 129752-IVB	1012 125882-IVB	1012 125183-IVB	1012 130944-IVB	300
2	1011 129762-IVB	1012 129766-IVB	1012 129767-IVB	1011 109201-IVB 1011* 125881-IVB	300 130948-IVB	300 120739-IVB	1011 125184-IVB	1011
3	300 129760-IVB	1011 129763-IVB	300 129761-IVB 300 130939-IVB	1012 129755-IVB	1011 125880-IVB	1012 130945-IVB	1011 130943-IVB	300
4	1012 129768-IVB	300 130938-IVB	1011 129764-IVB	300 131277-IVB	1012 129756-IVB		300# 130940-IVB	
Reported			Invalid					

\* Laboratory is running additional test because of Lean AFR and lower fuel flow on original matrix test

# Additional test donated by lab

TMC Oil	TestKey	Lab/Stand	Average Lifter Volume Loss by Keyence*, mm <sup>3</sup>		Camshaft Lobe Failure	Fuel Dilution @EOT, %	Used Oil FE@EOT, mg/kg	EOT Oil Con., g	Engine Hours	EOT Water by KF, mg/kg	Comment
			Intake	Exhaust							
300	129759-IVB	B1-2	1.78	1.39	N	17.8	275	259	254	2068	
	129752-IVB	A-1	1.95	1.39	N	7.7	223	72	252	1637	
	131277-IVB	A-1	2.06	0.8	N	7.6	165	68	852	1728	
	130948-IVB	A-2	1.27	0.72	N	7.0	109	311	452	1926	
	129761-IVB	B1-3	1.12	0.75	Y	15	145	-19	627	1988	Invalid due to lobe Failure, test to be re-run
	130939-IVB	B1-3	3.13	1.32	N	10.9	326	812	254	2409	
	129760-IVB	B1-1	2.1	1.15	N	12.2	184	80	658	1987	
	130940-IVB	G-1	1.81	0.85	N	8.1	173	-23	862	2016	Laboratory ran additional test at Test Sponsor's request
	130938-IVB	B1-2	3.05	1.59	N	9.4	362	399	860	2347	
1011	125879-IVB	B1-3	1.8	1.27	N	12.8	161	343	254	2297	
	129762-IVB	B1-1	2.05	1.32	N	12.9	195	359	456	2428	
	109201-IVB	A-1	1.09	0.84	N	7.2	116	167	452	1516	
	125880-IVB	A-2	0.93	0.57	N	7.1	113	61	652	1826	
	129763-IVB	B-2	1.98	1.15	N	12.0	269	460	658	2241	
	130943-IVB	G-1	2.03	1.1	N	8.6	186	166	660	1964	
	125184-IVB	G-1	1.84	0.93	N	6.5	154	48	458	2040	
	129764-IVB	B1-3	2.35	0.74	N	11.2	145	480	456	1980	
1012	127173-IVB	B1-1	1.55	1.19	N	14.3	156	428	254	2363	
	129766-IVB	B1-2	1.70	1.02	N	12.2	171	145	456	2267	
	129767-IVB	B1-3	0.82	0.99	N	12.1	111	-44	456	2371	
	125882-IVB	A-1	0.71	0.66	N	7.4	74	348	252	1979	
	125183-IVB	F-1	1.73	1.2	N	NR <sup>A</sup>	NR <sup>A</sup>	889	202	NR <sup>A</sup>	
	130944-IVB	G-1	1.81	NR <sup>A</sup>	N	5.4	212	826	254	2380	
	129756-IVB	A-2	1.1	0.85	N	8.2	138	130	852	2266	
	127955-IVB	A-1	1.55	0.67	N	7.4	105	160	652	2098	
129768-IVB	B1-1	1.42	0.9	N	9.9	141	241	860	2012		

\*with talc

<sup>A</sup> Not Reported