

VIE Precision Matrix

5/26/2016

The VIE precision matrix has been completed and all tests reported. The last two tests on Stand A1 have been declared invalid because of burnt exhaust valves. All other tests unless otherwise noted have been declared operationally valid by the panel. This is the last status report for the Sequence VIE precision matrix.

All reported data is posted at: <ftp://ftp.astmtmc.cmu.edu/refdata/gas/VIE/data/ltms.csv>
The field COM2 will identify the test as a precision matrix test with a value of "MATRIX".

Oils: 542-2 (0W-20), 544 (5W-30) and 1010-1 (5W-20)

If there are any questions please let me know.

Best regards,
Frank

Frank Farber

GF-6 Matrix Project Supervisor

<ftp://ftp.astmtmc.cmu.edu/docs/gas/GF6matrix/StatusReports/VIE/20160526VIEMatrixTestStatus.pdf>

VIE Precision Matrix

Step	Run Order	A 1	A 2	G 1	G 2	B	D	C	F	Eng. Hrs
	SOT Engine Hours	150	150	150	150	150	150	150	150	
1	1	544 113244-VIE	1010-1 110587-VIE	542-2 105705-VIE	544 113224-VIE	542-2 110003-VIE	542-2 110588-VIE	544 113298-VIE	1010-1 113223-VIE	350
								544 116040-VIE (new engine)		
	2	544 113247-VIE	1010-1 110725-VIE	1010-1 113235-VIE	542-2 105704-VIE	544 113258-VIE	542-2 113293-VIE	1010-1 113300-VIE	544 113220-VIE	550
								1010-1 113301-VIE (new engine)		
3	542-2 111451-VIE	542-2 111176-VIE	1010-1 113236-VIE	1010-1 108989-VIE	1010-1 110595-VIE	544 113292-VIE	542-2 113299-VIE Oil Con. Engine Abandoned	544 113221-VIE	750	
							542-2 114421-VIE (new engine)			
4	1010-1 110726-VIE	544 113243-VIE	544 113225-VIE	1010-1 113234-VIE	544 113259-VIE	1010-1 110589-VIE	542 114422-VIE (new engine)	542-2 113222-VIE	950	
2	5	544 113246-VIE	544 113245-VIE Failed Eng.		542-2 113229-VIE	544 113260-VIE				1150
	6	1010-1 110727-VIE	1010-1		542-2 113230-VIE	542-2 110004-VIE				1350
	7	1010-1 113252-VIE	544		544 113226-VIE	542-2 113261-VIE				1550
	8	542-2 113248-VIE	542-2		544 113227-VIE	1010-1 113265-VIE				1750
	9	542-2 113249-VIE	542-2		1010-1 113238-VIE	1010-1 113266-VIE				1950
	10	544 115022-VIE	1010-1		542-2 113232-VIE	544 116027-VIE				2150
	11	1010-1 113254-VIE	1010-1		544 113228-VIE					2350
	EOT Engine Hours	950	2350	950	2350	2150	950	950	950	Total Runs
	Runs/ Engine	4	11	4	11	10	4	4	4	52

Test Reported

Invalid

VIE Precision Matrix

Sorted by Engine Hours

IND	Testkey	Lab/Stand	Un-Adjusted			Oil Cons., ml	Engine Hours	Comment
			FEI1	FEI2	FEISUM			
542-2	110588-VIE	D2	2.77	1.70	4.47	400	370	
	105705-VIE	G1	2.34	1.70	4.04	700	390	
	110003-VIE	B1	3.00	1.86	4.86	600	399	
	105704-VIE	G2	2.93	2.16	5.09	800	561	
	113293-VIE	D2	2.53	1.74	4.27	400	571	
	111176-VIE	A2	2.46	1.48	3.94	600	776	
	111451-VIE	A1	2.32	1.41	3.73	1100	779	
	114421-VIE	C2	2.31	1.30	3.61	1200	794	New Engine
	113222-VIE	F2	2.72	1.99	4.71	700	968	
	114422-VIE	C2	1.97	1.27	3.24	1600	1005	New Engine
	113229-VIE	G2	2.30	1.73	4.03	1000	1154	
	113230-VIE	G2	2.02	1.31	3.33	1200	1371	
	110004-VIE	B1	1.91	1.07	2.98	800	1406	
	113261-VIE	B1	1.84	0.78	2.62	1200	1603	
	113248-VIE	A1	1.77	0.93	2.70	1800	1799	
113249-VIE	A1	1.97	0.87	2.84	1400	1999		
113232-VIE	G2	1.81	0.95	2.76	1200	2165		
544	116040-VIE	C2	1.81	1.53	3.34	1000	358	New Engine
	113224-VIE	G2	1.36	1.83	3.19	600	363	
	113298-VIE	C2	2.14	2.08	4.22	700	368	Bad fuel temp. control
	113244-VIE	A1	1.07	0.49	1.56	1000	374	
	113220-VIE	F2	0.84	1.51	2.35	650	569	
	113247-VIE	A1	1.44	1.47	2.91	800	579	
	113258-VIE	B1	1.48	1.64	3.12	1000	597	
	113221-VIE	F2	1.04	1.64	2.68	700	768	
	113292-VIE	D2	1.48	1.24	2.72	800	772	
	113243-VIE	A2	1.24	1.11	2.35	700	978	
	113259-VIE	B1	1.04	1.38	2.42	800	992	
	113225-VIE	G1	1.10	1.04	2.14	1600	1002	
	113246-VIE	A1	1.31	1.32	2.63	700	1202	
	113260-VIE	B1	0.89	1.02	1.91	1000	1210	
	113226-VIE	G2	1.07	1.10	2.17	1000	1568	
	113227-VIE	G2	0.79	0.71	1.50	1100	1767	
	115022-VIE	A1	1.40	1.58	2.98	1600	2198	Burnt Exhaust Valves
116207-VIE	B1	0.88	0.41	1.29	1400	2218		
113228-VIE	G2	0.98	0.62	1.60	1200	2376		

VIE Precision Matrix

IND	Testkey	Lab/Stand	Un-Adjusted			Oil Cons., ml	Engine Hours	Comment
			FEI1	FEI2	FEISUM			
1010-1	113223-VIE	F2	2.12	2.14	4.26	500	364	
	110587-VIE	A2	1.60	1.74	3.34	600	374	
	113300-VIE	C2	2.18	1.82	4.00	1100	570	
	110725-VIE	A2	1.84	1.59	3.43	700	574	
	113301-VIE	C2	2.49	1.69	4.18	1100	575	New Engine
	113235-VIE	G1	1.67	1.51	3.18	1100	602	
	108989-VIE	G2	1.95	2.12	4.07	1000	758	
	110595-VIE	B1	1.77	1.99	3.76	1000	794	
	113236-VIE	G1	1.59	1.49	3.08	1700	803	
	110589-VIE	D2	1.83	1.68	3.51	900	928	
	113234-VIE	G2	1.71	2.00	3.71	1100	956	
	110726-VIE	A1	1.57	1.43	3.00	700	1003	
	110727-VIE	A1	1.39	0.68	2.07	600	1399	
	113252-VIE	A1	1.50	1.28	2.78	1700	1600	
	113265-VIE	B1	1.34	0.75	2.09	600	1799	
	113238-VIE	G2	1.41	1.12	2.53	1000	1966	
	113266-VIE	B1	1.45	0.80	2.25	1400	2021	
113254-VIE	A1	0.97	1.00	1.97	1600	2427	Burnt Exhaust Valves	