

VIE Precision Matrix

5/11/2016

The VIE precision matrix has been completed and all tests reported. The Sequence VI Surveillance Panel has declared Lab C's 1st test on their original engine (Testkey 113298-VIE) invalid because of large excursions on fuel temperature. All other tests unless otherwise noted have been declared operationally valid by the panel.

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/20160511VIEMatrixTestStatus.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	
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		