

VIE Precision Matrix

18 test results have been reported.

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".

| Step | Run Order | A 1 | A 2 | G 1 | G 2 | B | D | C | F | Engine Hrs |
|------|------------------|------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------|
| | | SOT Engine Hours | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| 1 | 1 | 544 | 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 |
| | 2 | 544 | 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 |
| | 3 | 542-2 | 542-2 111176-VIE | 1010-1 113236-VIE | 1010-1 108989-VIE | 1010-1 110595-VIE | 544 113292-VIE | 542-2 | 544 113221-VIE | 750 |
| | 4 | 1010-1 | 544 113243-VIE | 544 | 1010-1 113234-VIE | 544 113259-VIE | 1010-1 110589-VIE | 542-2 | 542-2 113222-VIE | 950 |
| 2 | 5 | | 544 | | 542-2 | 544 | | | | 1150 |
| | 6 | | 1010-1 | | 542-2 | 542-2 | | | | 1350 |
| | 7 | | 544 | | 544 | 542-2 | | | | 1550 |
| | 8 | | 542-2 | | 544 | 1010-1 | | | | 1750 |
| | 9 | | 542-2 | | 1010-1 | 1010-1 | | | | 1950 |
| | 10 | | 1010-1 | | 544 | 542-2 | | | | 2150 |
| | 11 | | 1010-1 | | 542-2 | | | | | 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

Estimated matrix completion: Week of March 11, 2016

VIE Precision Matrix

| IND | Testkey | Lab/Stand | FEI1 | FEI2 | FEISUM | Total Oil Consumption, ml | Comment |
|--------|------------|-----------|------|------|--------|---------------------------|---------|
| 542-2 | 110588-VIE | D2 | 2.77 | 1.70 | 4.47 | 400 | |
| | 110003-VIE | B1 | 3.00 | 1.86 | 4.86 | 600 | |
| | 113293-VIE | D2 | 2.53 | 1.74 | 4.27 | 400 | |
| | 105704-VIE | G2 | 2.93 | 2.16 | 5.09 | 800 | |
| | 105705-VIE | G1 | 2.34 | 1.70 | 4.04 | 700 | |
| | 111176-VIE | A2 | 2.46 | 1.48 | 3.94 | 600 | |
| 544 | 113224-VIE | G2 | 1.36 | 1.83 | 3.19 | 600 | |
| | 113221-VIE | F2 | 1.04 | 1.64 | 2.68 | 700 | |
| | 113292-VIE | D2 | 1.48 | 1.24 | 2.72 | 800 | |
| | 113220-VIE | F2 | 0.84 | 1.51 | 2.35 | 650 | |
| | 113258-VIE | B1 | 1.48 | 1.64 | 3.12 | 1000 | |
| 1010-1 | 110587-VIE | A2 | 1.60 | 1.74 | 3.34 | 600 | |
| | 113223-VIE | F2 | 2.12 | 2.14 | 4.26 | 500 | |
| | 108989-VIE | G2 | 1.95 | 2.12 | 4.07 | 1000 | |
| | 110725-VIE | A2 | 1.84 | 1.59 | 3.43 | 700 | |
| | 110595-VIE | B1 | 1.77 | 1.99 | 3.76 | 1000 | |
| | 113234-VIE | G2 | 1.71 | 2.00 | 3.71 | 1100 | |
| | 110589-VIE | D2 | 1.83 | 1.68 | 3.51 | 900 | |

Guidelines on Running the PM

1. If engine fails before the matrix finishes, move remaining tests to another matrix engine.
2. After all labs run the Step 1 tests, reassess engine “health” at the labs to determine the engines that will run additional tests to reach higher engine hours.

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/20151229VIEMatrixTestStatus.pdf>