

Populations, Activity and Emissions of Diesel Nonroad Equipment in EPA Region 7

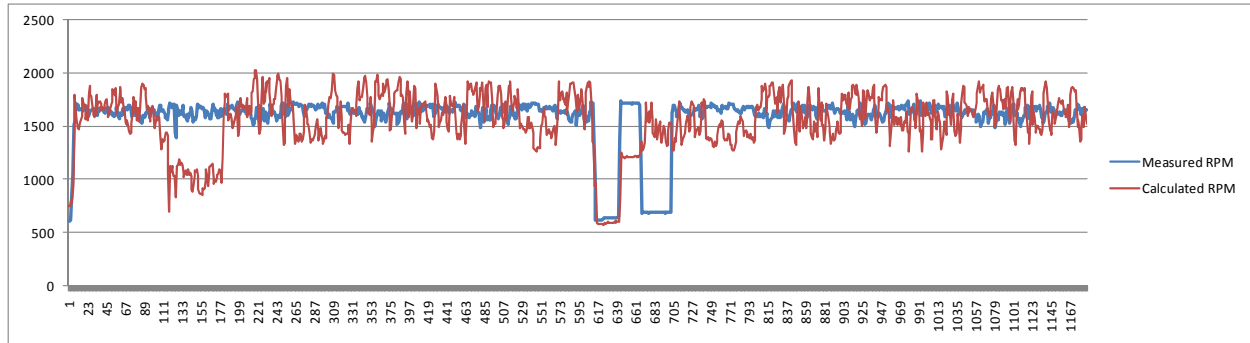
Summary RPM Correlations Developed Appendix AA

Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

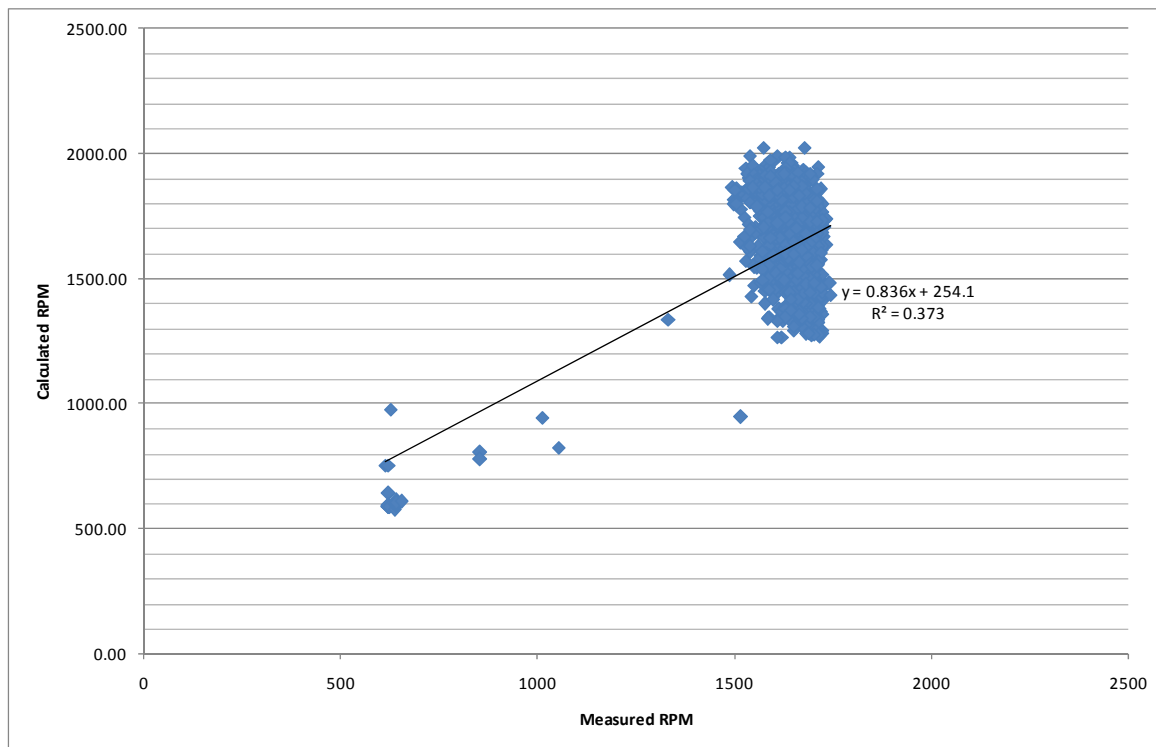
Prepared for EPA by
Eastern Research Group, Inc. (ERG)
EPA Contract No. EP-C-06-080

Phase: 1
Test ID: 0685_2214
Filename: pp_0685_2214_070621_A.csv

Exhaust high/low cutpoint used (kg/hr): 300
High speed factor: 2.2
Low speed factor: 4.1



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

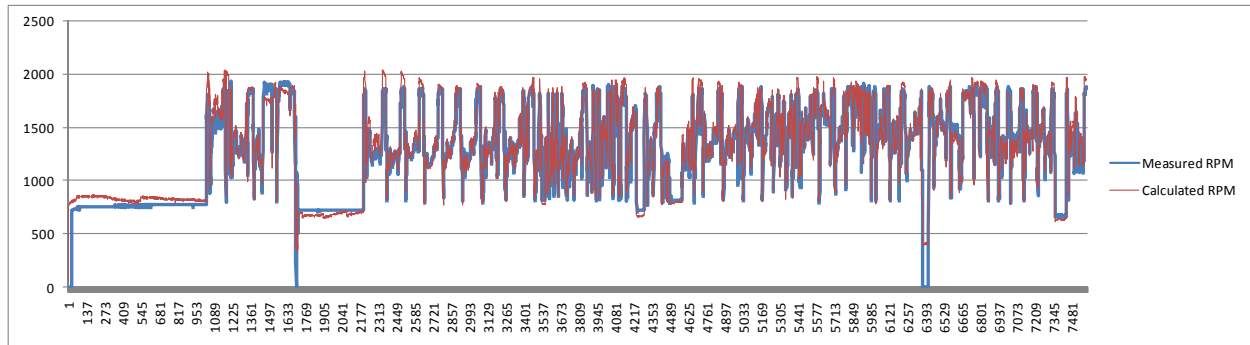


Scatter plot of calculated vs. measured RPM during “valid” collection period

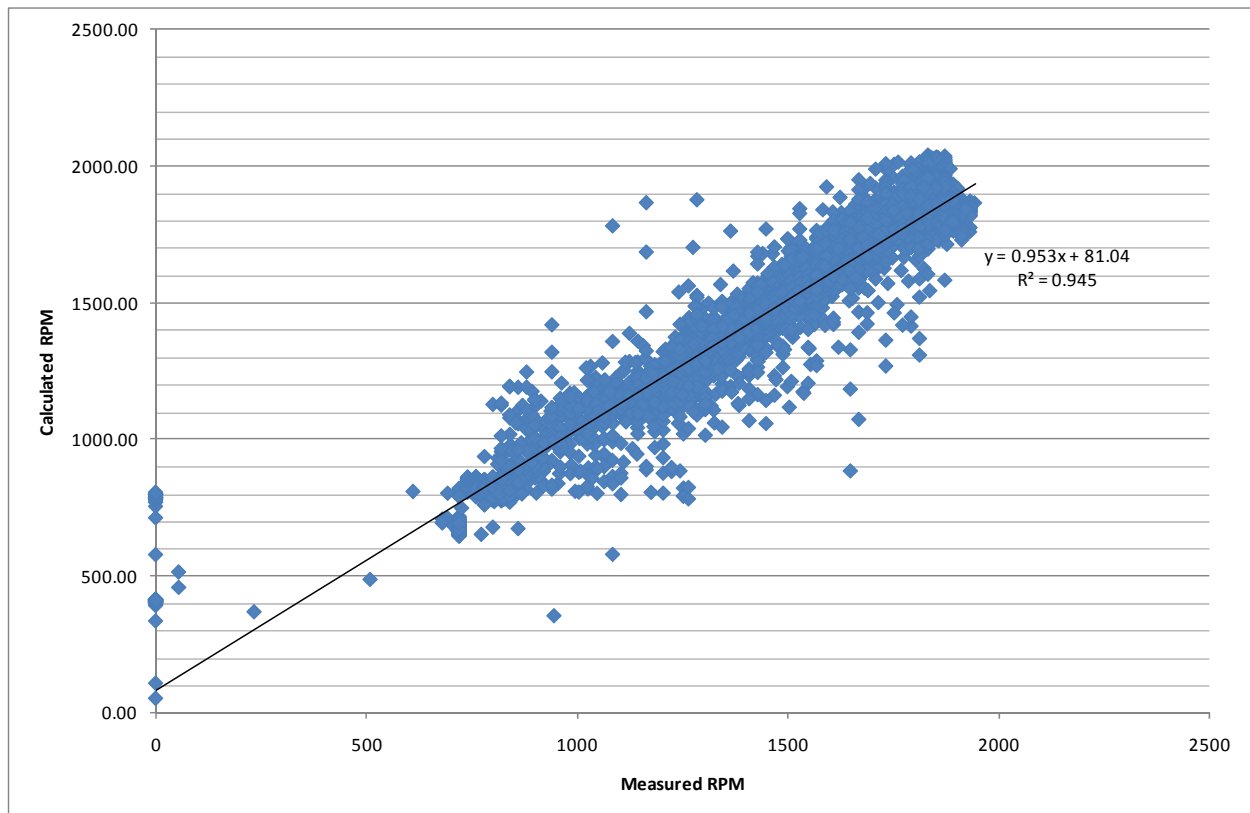
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 2
Test ID: 3858_1482
Filename: pp_3858_1482_1_Test1.csv

Exhaust high/low cutpoint used (kg/hr): 250
High speed factor: 4.4
Low speed factor: 4.7



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

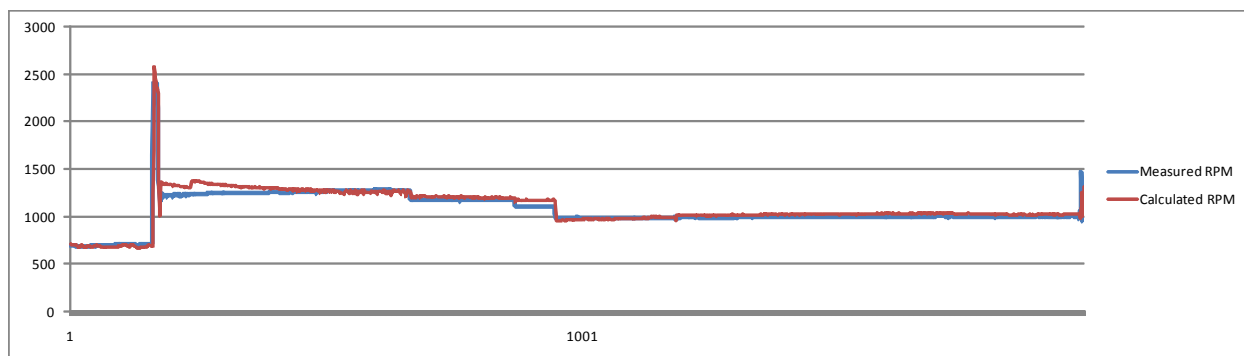


Scatter plot of calculated vs. measured RPM during “valid” collection period

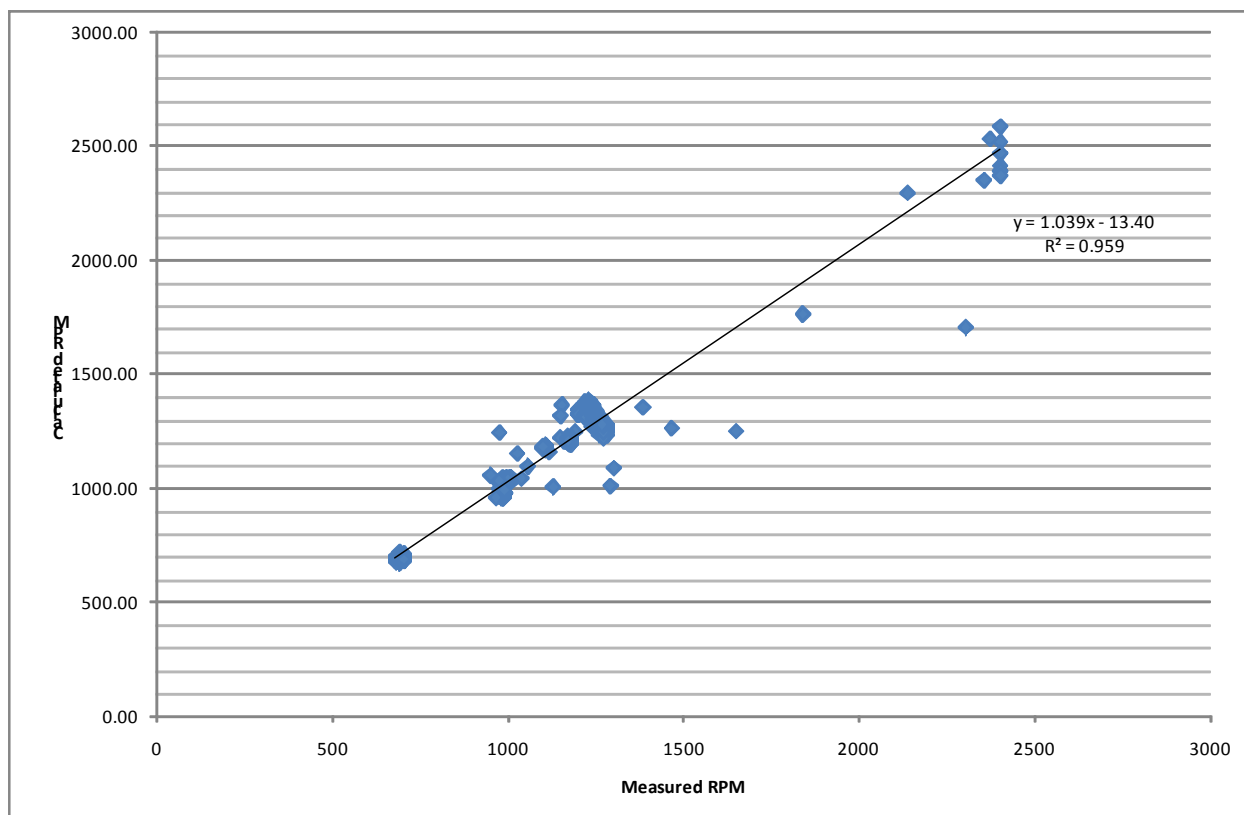
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 2
Test ID: 2523_0713
Filename: pp_2523_0713a_Test1.csv

Exhaust high/low cutpoint used (kg/hr): 450
High speed factor: 2.2
Low speed factor: 3.1



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

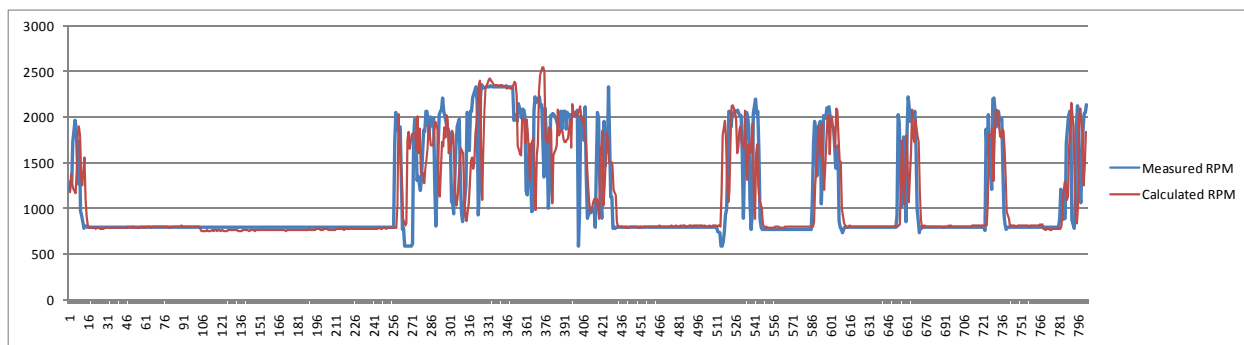


Scatter plot of calculated vs. measured RPM during “valid” collection period

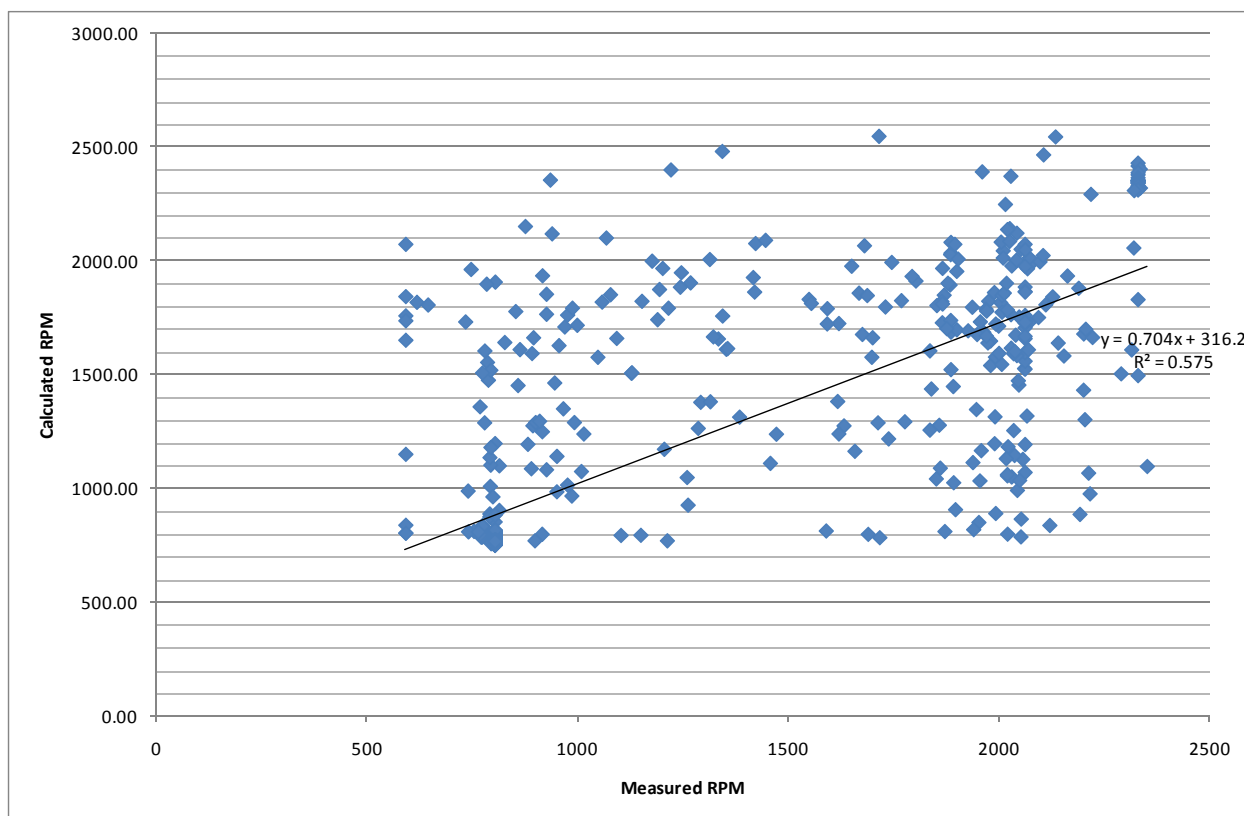
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 2523_6087
Test ID: pp_2523_6087_Test2.csv
Filename:

Exhaust high/low cutpoint used (kg/hr): 525
High speed factor: 3.0
Low speed factor: 4.1



Time-series plot comparing calculated vs. measured RPM during “valid” collection period



Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

| | | | |
|------------------|---------------------------------|--|-----|
| Phase: | 2 | Exhaust high/low cutpoint used (kg/hr): | 400 |
| Test ID: | 2523_0210 | High speed factor: | 2.9 |
| Filename: | N/A (used pre-test calibration) | Low speed factor: | 3.5 |

N/A, no valid RPM for comparison

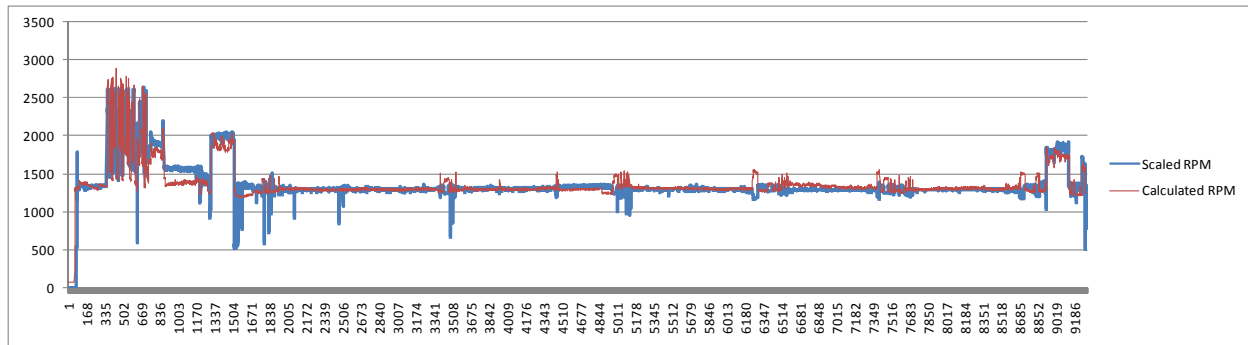
Time-series plot comparing calculated vs. measured RPM during “valid” collection period

N/A, no valid RPM for comparison

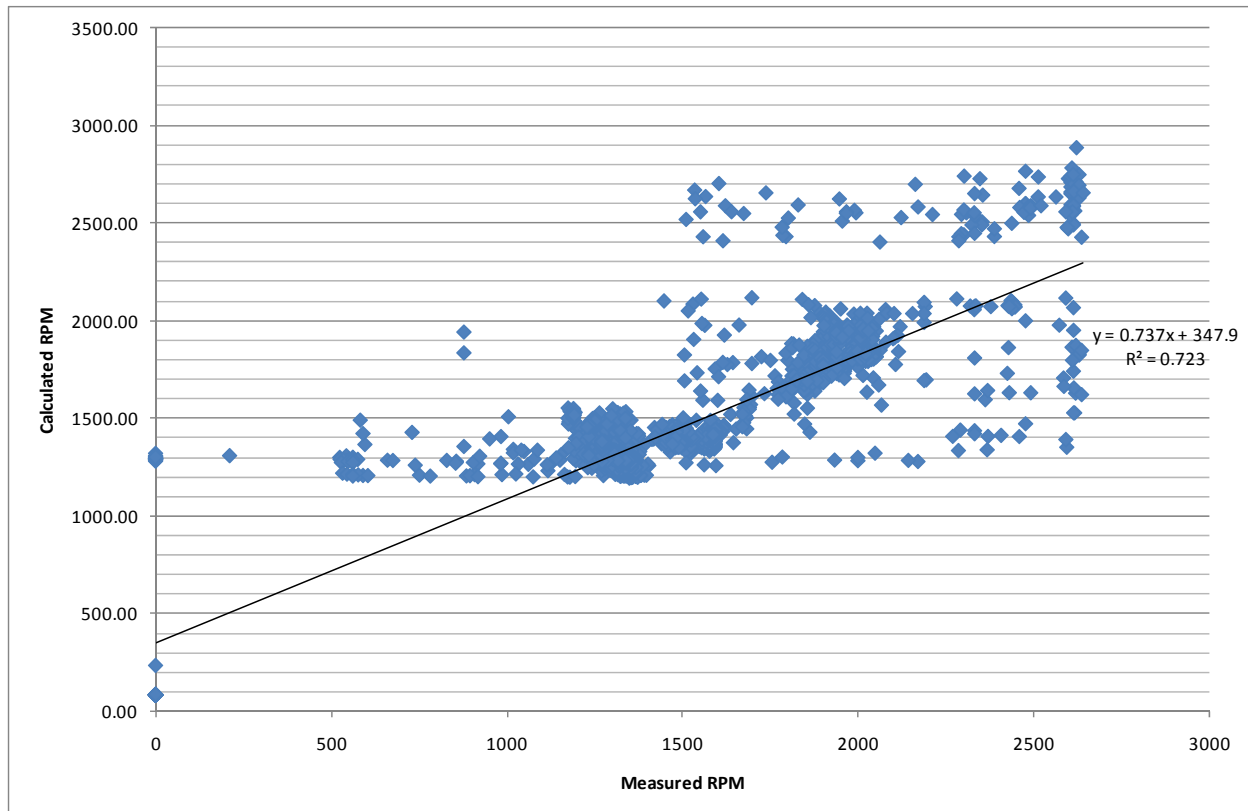
Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

| | | | |
|-----------|------------------------|---|-----|
| Phase: | 2 | Exhaust high/low cutpoint used (kg/hr): | 400 |
| Test ID: | 2745_1190 | High speed factor: | 6.0 |
| Filename: | pp_2745_1190_Test3.csv | Low speed factor: | 5.3 |



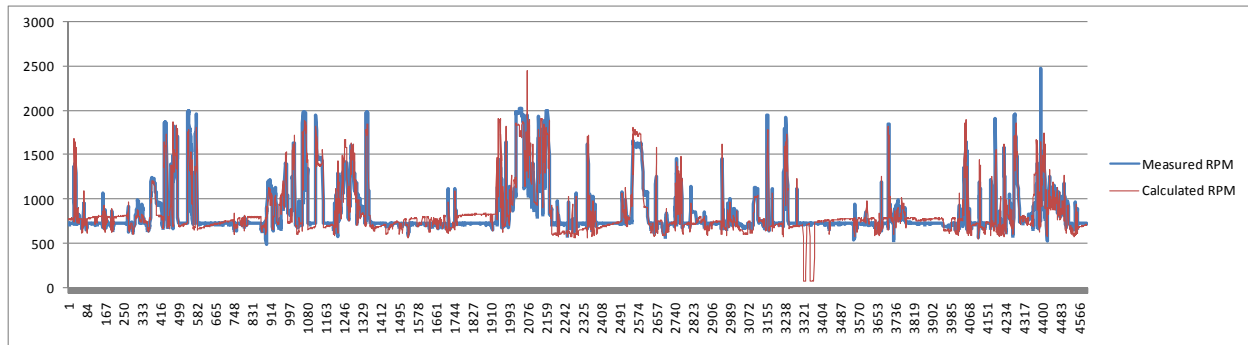
Time-series plot comparing calculated vs. measured RPM during “valid” collection period



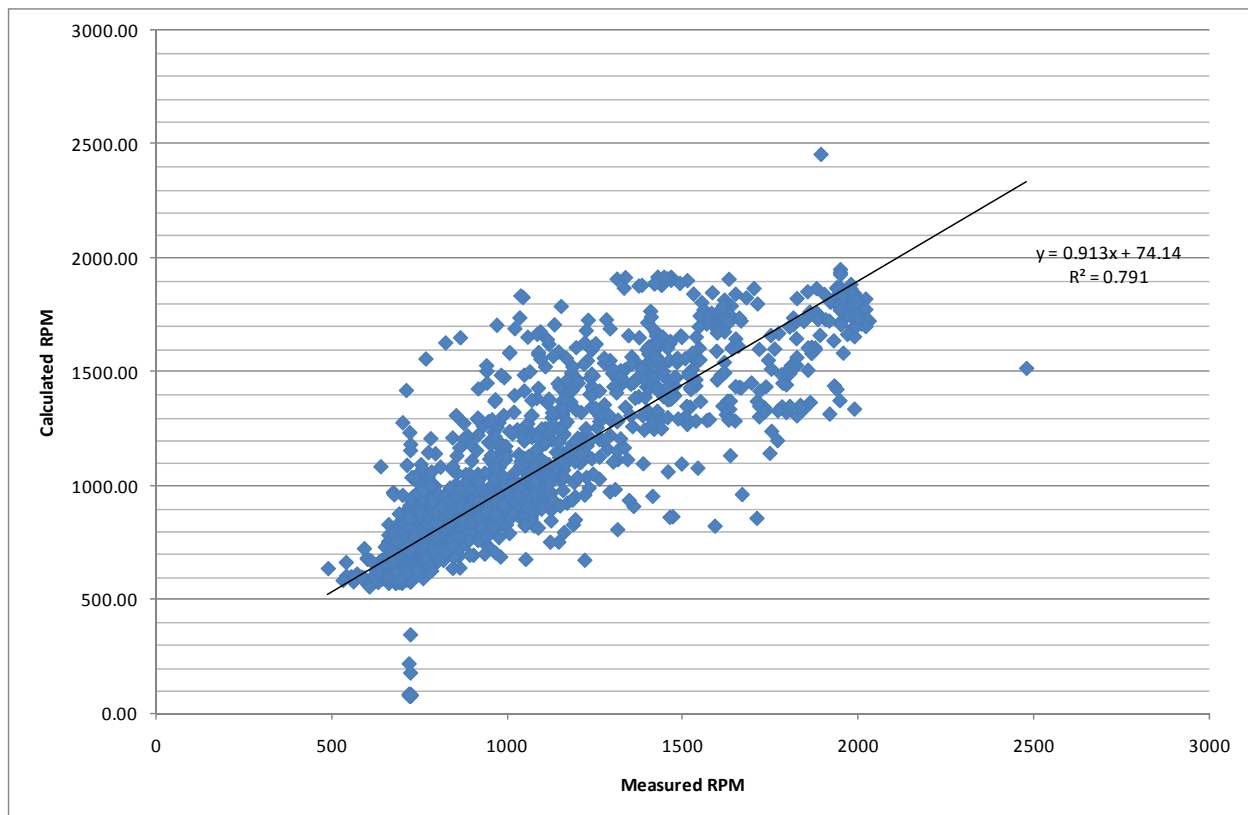
Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

| | | | |
|-----------|--------------------------|---|-----|
| Phase: | 2 | Exhaust high/low cutpoint used (kg/hr): | 400 |
| Test ID: | 3858_4862_1, 3858_4862_2 | High speed factor: | 3.2 |
| Filename: | pp_3858_4862_2_Test4.csv | Low speed factor: | 4.8 |



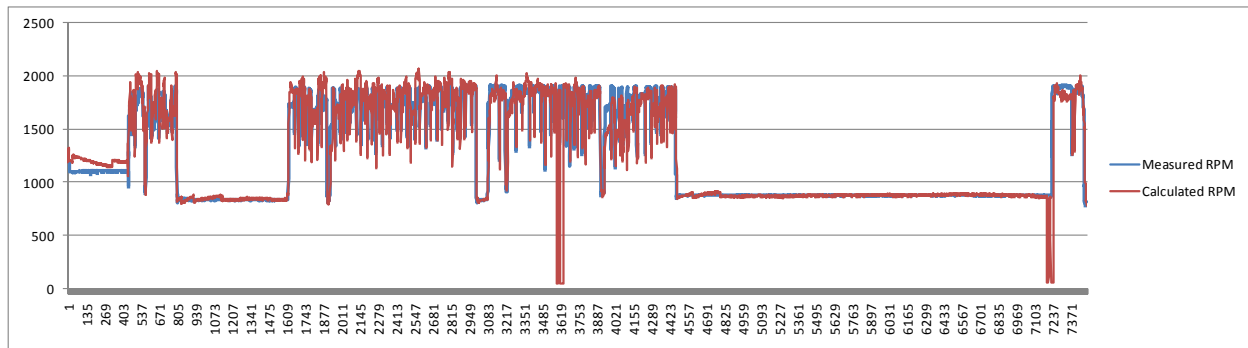
Time-series plot comparing calculated vs. measured RPM during “valid” collection period



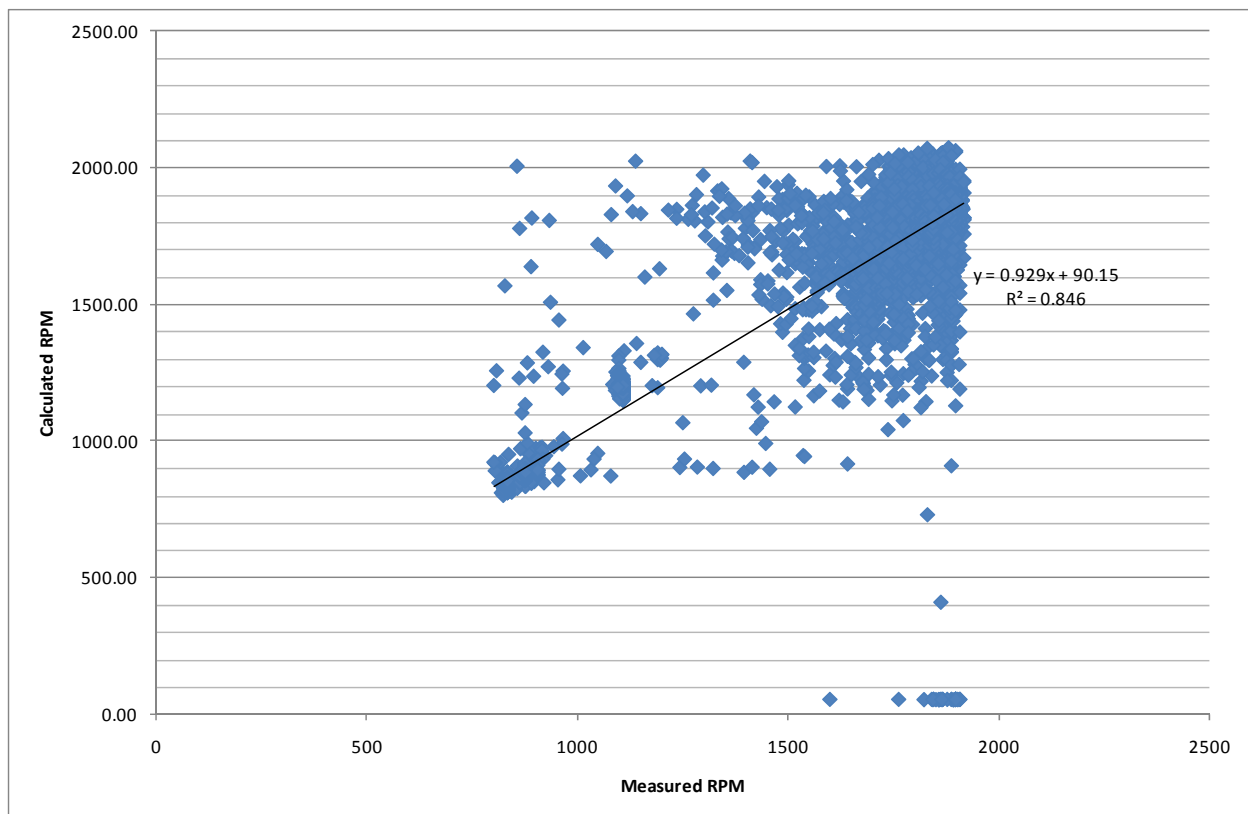
Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

| | | | |
|-----------|------------------------|---|-----|
| Phase: | 2 | Exhaust high/low cutpoint used (kg/hr): | 300 |
| Test ID: | 3597_9706 | High speed factor: | 3.7 |
| Filename: | pp_3597_9706_Test3.csv | Low speed factor: | 4.6 |



Time-series plot comparing calculated vs. measured RPM during “valid” collection period



Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3

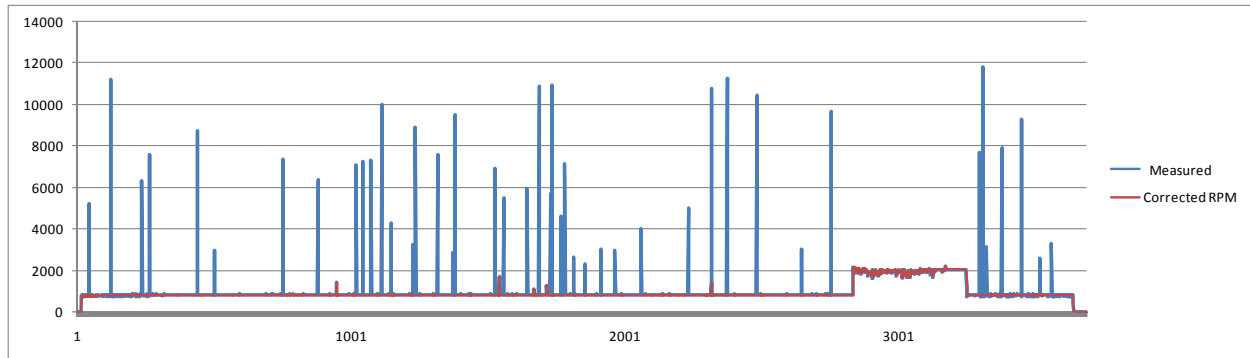
Test ID: 0229_3781

Filename: 0229-3781.csv

Exhaust high/low cutpoint used (kg/hr): N/A

High speed factor: N/A

Low speed factor: N/A



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

Scatter plot not made – “New” RPM is original RPM data with “spikes” filtered using logic listed in Appendix Y

Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3

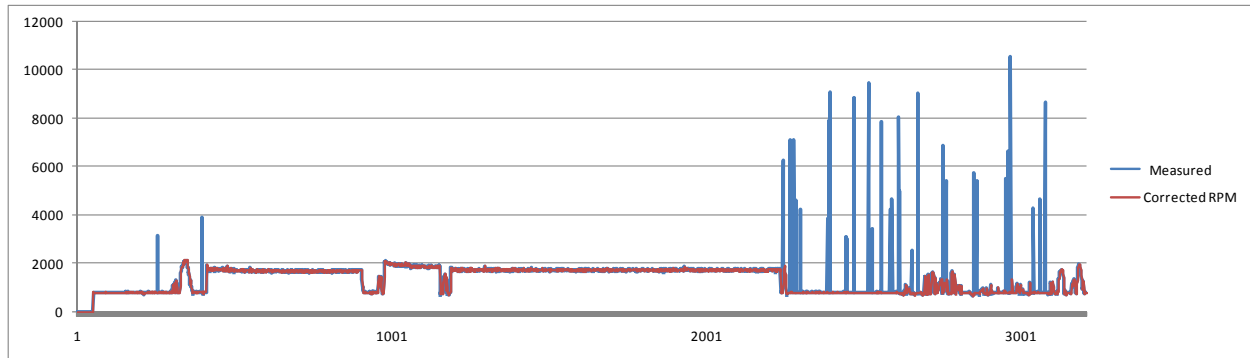
Test ID: 0229_0045

Filename: 0229-0045.csv

Exhaust high/low cutpoint used (kg/hr): N/A

High speed factor: N/A

Low speed factor: N/A



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

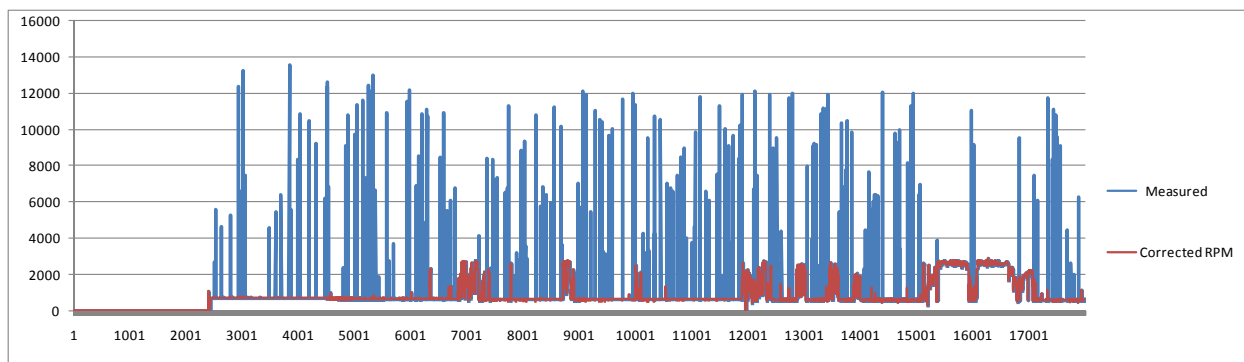
Scatter plot not made – “New” RPM is original RPM data with “spikes” filtered using logic listed in Appendix Y

Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3
Test ID: 9960_6086
Filename: 9960_6086a.csv

Exhaust high/low cutpoint used (kg/hr): N/A
High speed factor: N/A
Low speed factor: N/A



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

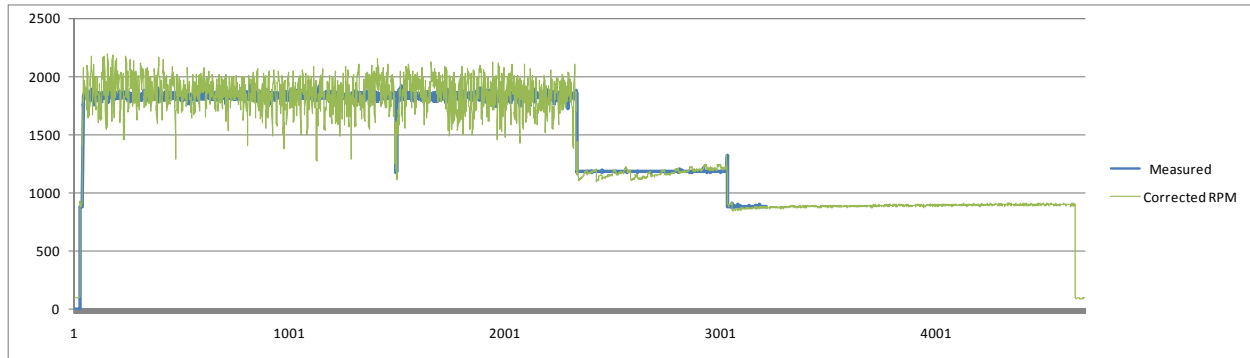
Scatter plot not made – “New” RPM is original RPM data with “spikes” filtered using logic listed in Appendix Y

Scatter plot of calculated vs. measured RPM during “valid” collection period

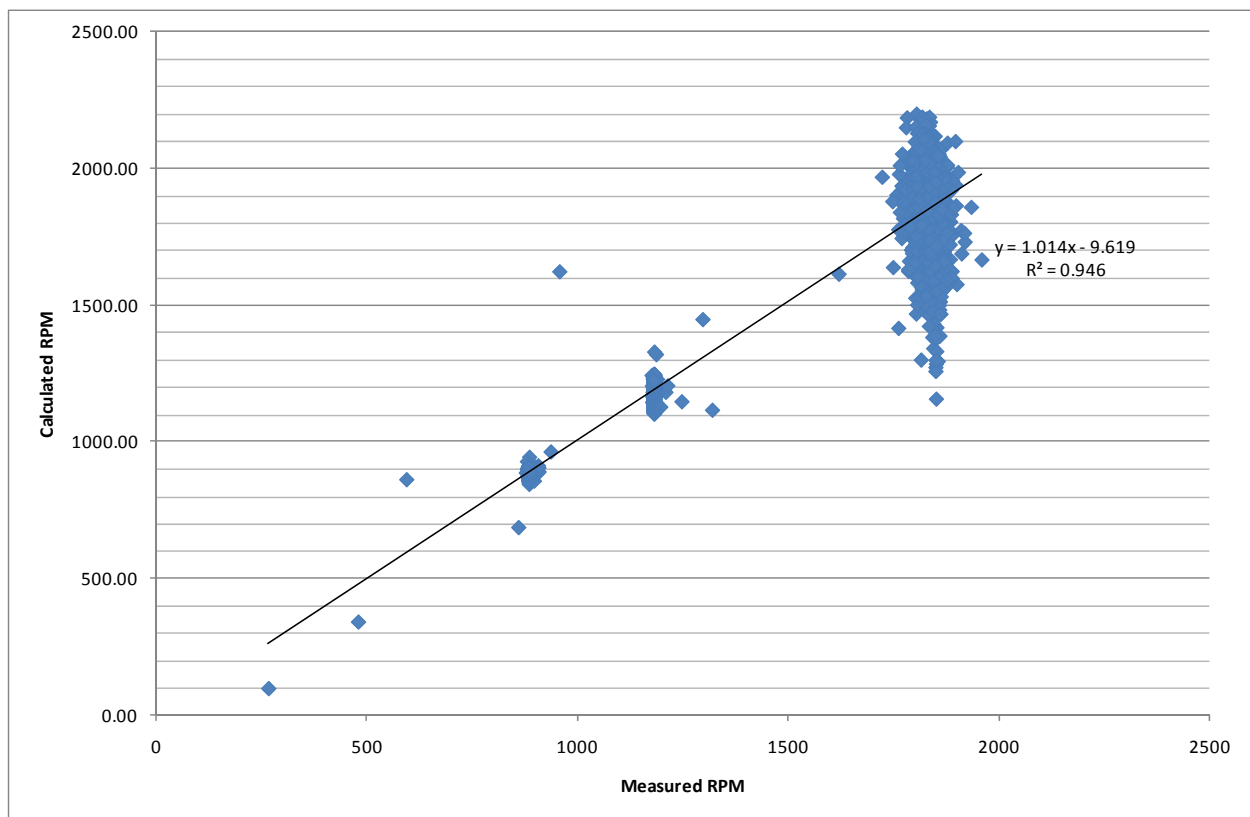
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3
Test ID: 8391-3333_1
Filename: 8391-3333_1B.csv

Exhaust high/low cutpoint used (kg/hr): 700
High speed factor: 1.48
Low speed factor: 2.34



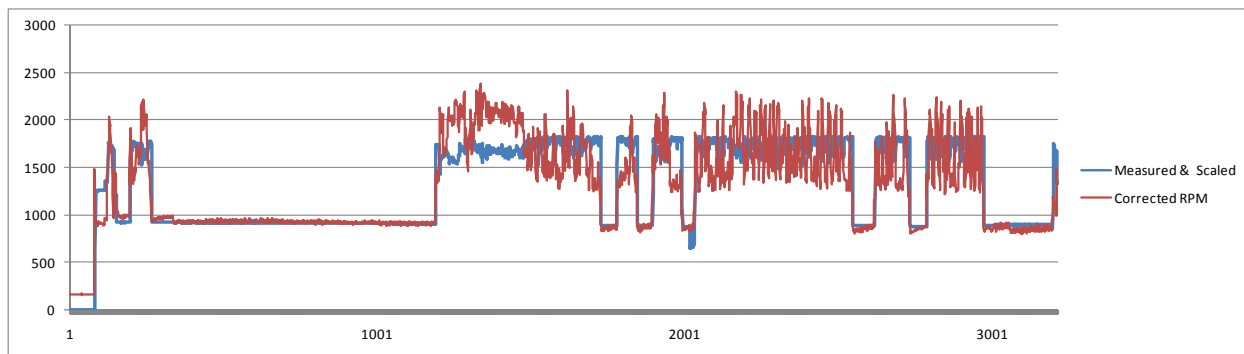
Time-series plot comparing calculated vs. measured RPM during “valid” collection period



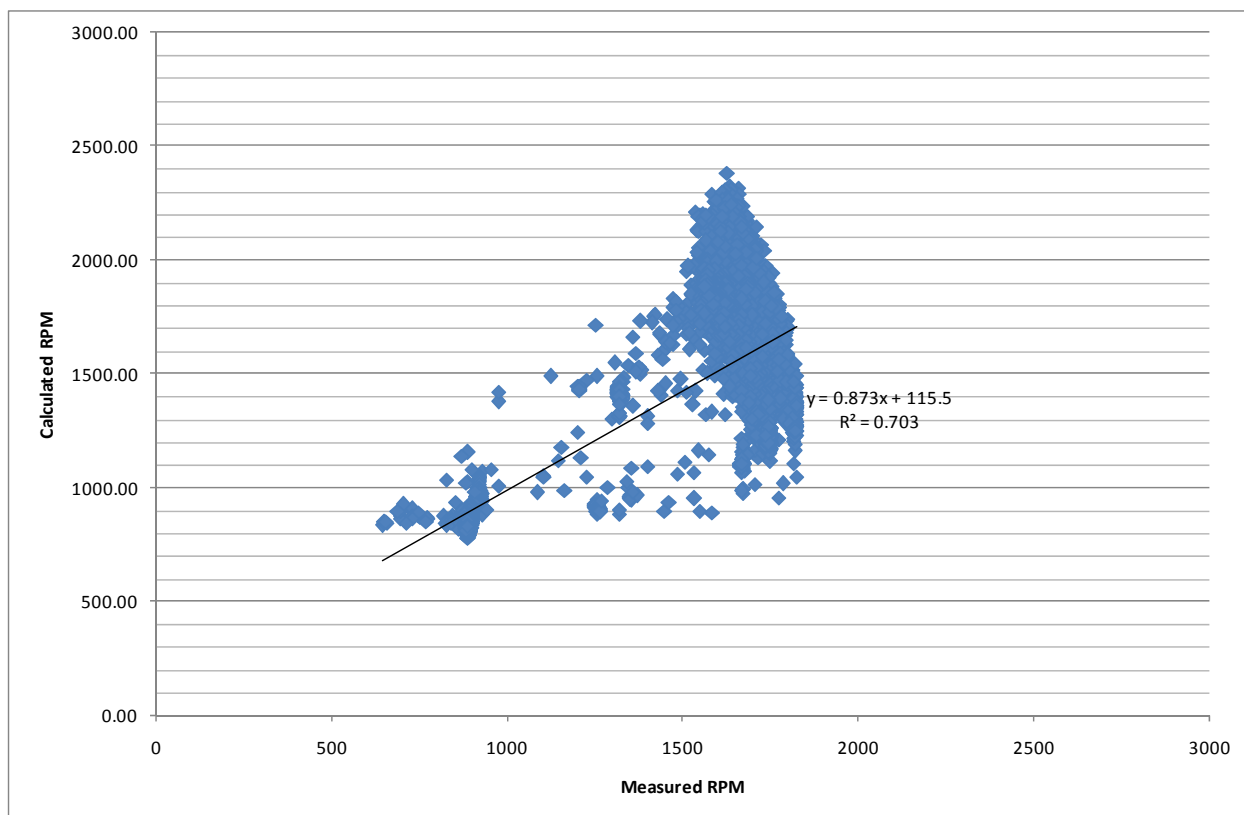
Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3 Exhaust high/low cutpoint used (kg/hr): 400
Test ID: 8418-0961 High speed factor: 2.2
Filename: 8418-0961.csv Low speed factor: 3.75



Time-series plot comparing calculated vs. measured RPM during “valid” collection period



Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3

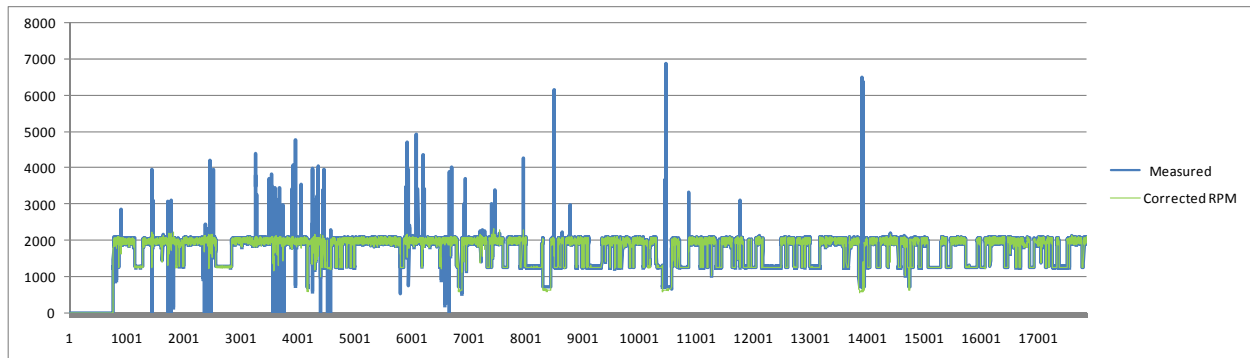
Test ID: 9272_3481

Filename: 9272-3481B.csv

Exhaust high/low cutpoint used (kg/hr): N/A

High speed factor: N/A

Low speed factor: N/A



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

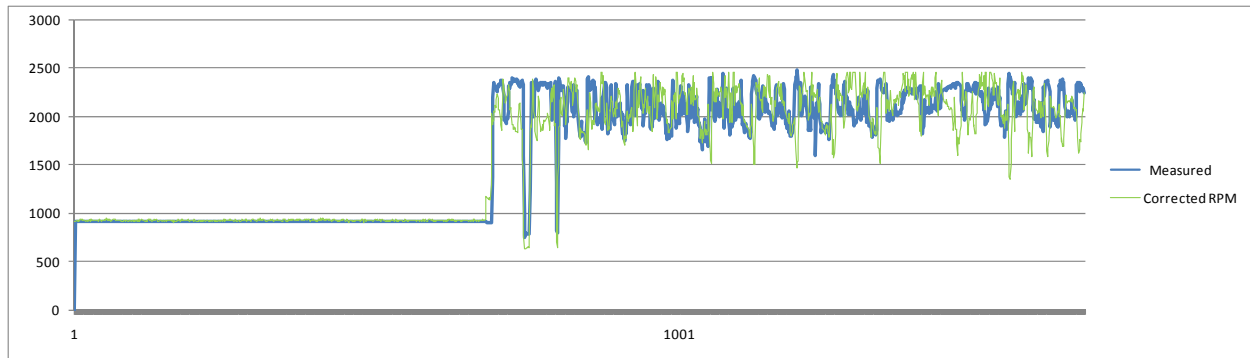
Scatter plot not made – “New” RPM is original RPM data with “spikes” filtered using logic listed in Appendix Y

Scatter plot of calculated vs. measured RPM during “valid” collection period

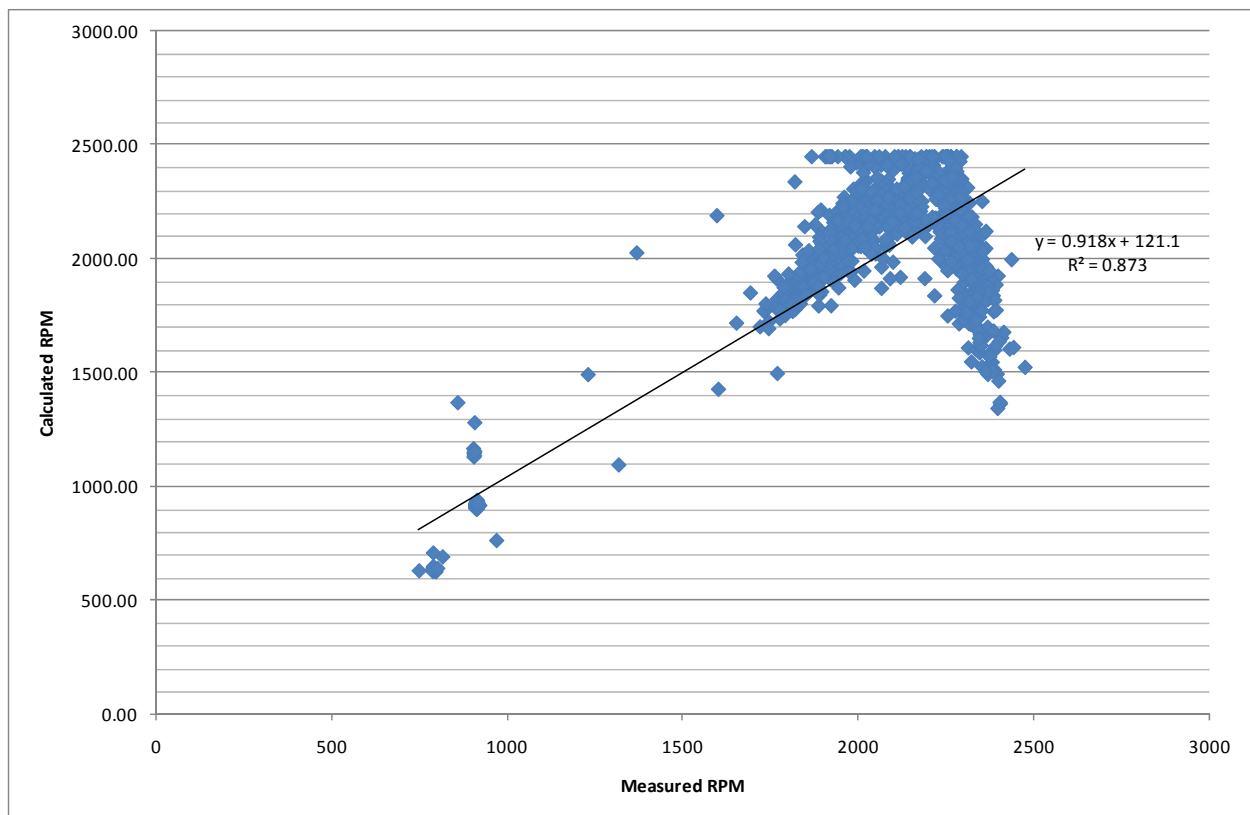
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3
Test ID: 9272-2494_2
Filename: 9272-2494_2B.csv

Exhaust high/low cutpoint used (kg/hr): 500
High speed factor: 2.5
Low speed factor: 4.1



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

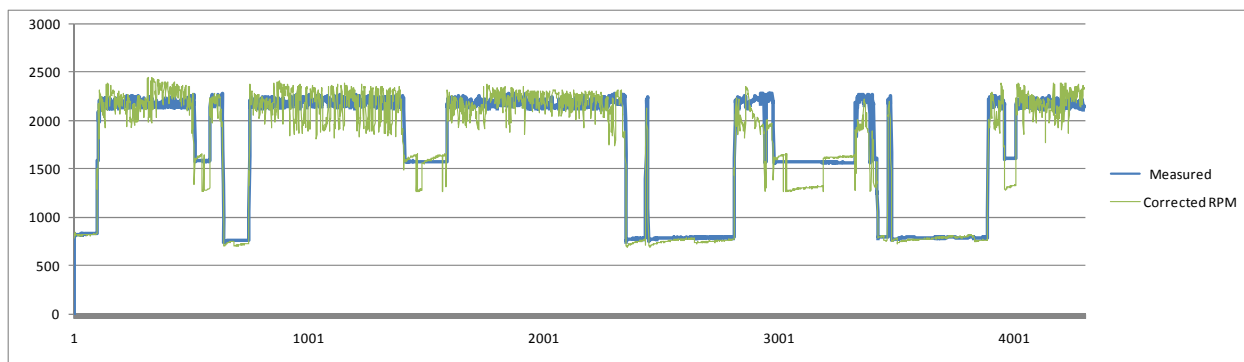


Scatter plot of calculated vs. measured RPM during “valid” collection period

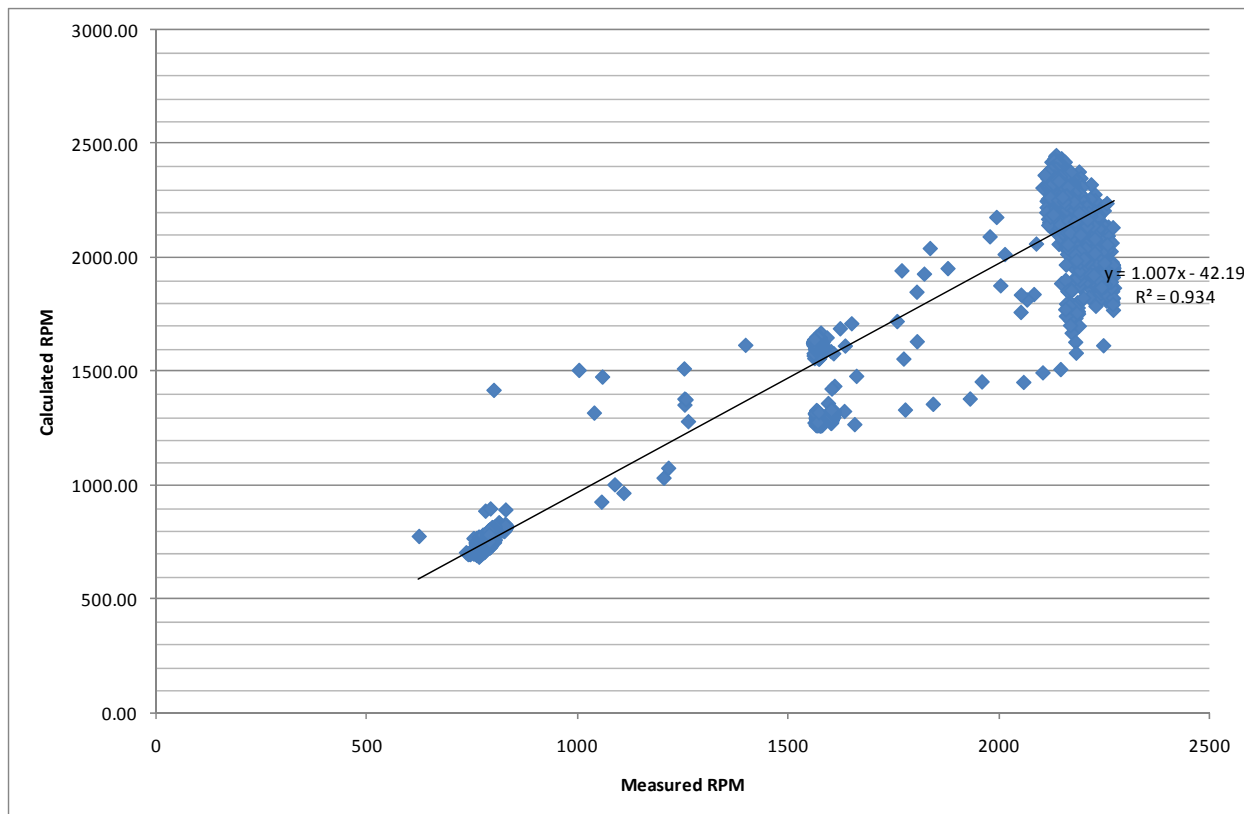
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3
Test ID: 9272-0853
Filename: 9272-0853.csv

Exhaust high/low cutpoint used (kg/hr): 600
High speed factor: 2.1
Low speed factor: 2.75



Time-series plot comparing calculated vs. measured RPM during “valid” collection period

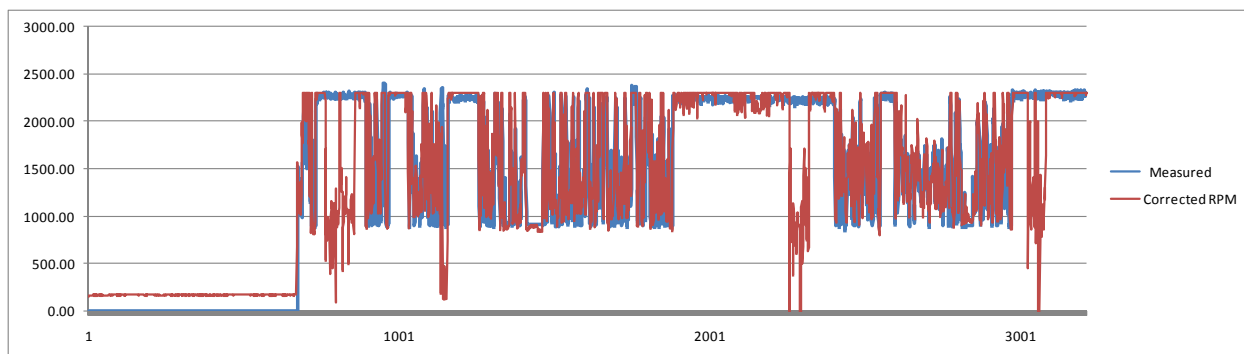


Scatter plot of calculated vs. measured RPM during “valid” collection period

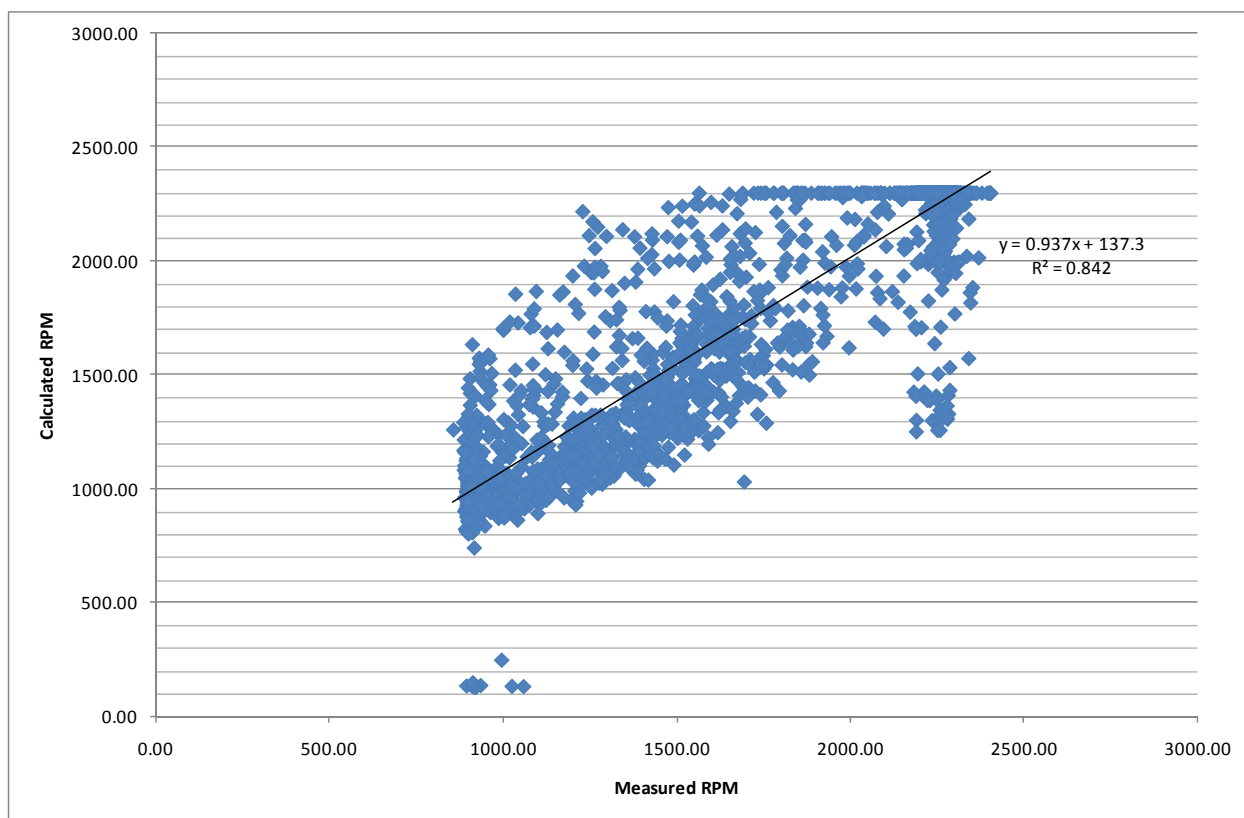
Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.

Phase: 3
Test ID: 0062_6092
Filename: 0062-6092B.csv

Exhaust high/low cutpoint used (kg/hr): N/A
High speed factor: 5.63
Low speed factor: 5.63



Time-series plot comparing calculated vs. measured RPM during “valid” collection period



Scatter plot of calculated vs. measured RPM during “valid” collection period

Please see Appendix Y for additional information regarding data used for RPM correlation development, time periods where RPM was corrected, and corrections and factors used.