SEMA Emission Lab Test Report

for Exhaust Emission Test Procedures according

Date:	1/15/2020	**Time:**	12:51:38
Test Legislation:	EPA		
Test Cycle:	FTP75		
Test Purpose:	Certification		
Test Name:	FTP75		
Test Cell:	iGEMV_TC1		
Remark:	FTP, Derive Baseline		

CONFIDENTIAL

Date: 4/14/20

Accept ✓ Reject

Signature:

TestInformation

General Data

Test Number	*FTP75_20200115_06_TC1*		
Test Name	*FTP75*		
Test Cell	*iGEMV_TC1*		
Test Type	*FTP75*		
Legislation	*EPA*		
Requirements (Bag)	*CERTIFICATION*		
Date	*1/15/2020*	CH_4 Response Factor	
Test Start	*12:51:38*	Odometer Start[mile]	*78749*
Start Time Cycle	*2020-01-15 12|59-39-(000)*	Delay Time Method	*Default*
Test End	*14:07:50*		
Operator	*Dan Ogden*	Air Condition	*YES*
Driver	*Mario Michel*	Particle Measurement	OFF
Shifttable	Auto		
Flow Stream	*Bag Only Diesel*		
Calibrated Ranges	*selectrange*		
Remark :	*FTP, Derive Baseline*		

Vehicle Data

Test Group	*Derive F-250*	Transmission	*Automatic*
Manufacturer	*Ford*	Drive Axle Weight[lb]	*0*
Model	*F-250*	Tank Position	
Model Year	*2011*	Tank Material	*Plastic*
VIN	*1FT7W2BT9BEA15523*	Tank Volume[gal]	*26.00*
License Plate	*HJHU73*	Evaporative Family	*N/A*
Order Number		Canister Volume[l]	*0.00*
Engine Family	*BFMXD06.761A*	Canister Working Capacity[g]	*0*
Engine Trim Level	*trimEng*	Tire Manufacturer	*CONTINENTAL*
Engine Code	*codeEng*	Tire Model	*CONTITRAC TR*
Displacement [l]	*6.700*	Tire Size	*275/70/18*
Number of Cylinders	*6*	Tire Pressure [psi]	*65*

Dyno Data

Dyno Type	*SREV*	A [lbf]	*61.4690*
Inertia [lb]	*9500.00*	B [lbf/mph]	*0.14073*
Simulation Coefficient N	*2*	C [lbf/mph2]	*0.049012*

Fuel Data *2007 Certification Diesel HD0521GP10*

Fuel Type	*DIESEL*	Fuel Temperature [°C]	*15.56*
Fuel Analyze Date		Fuel Density [kg/l]	*0.8542*
Fuel Manufacturer		Net Heat. Val. [BTU/lb]	*18325*
Fuel Tank Number		Carb. Weight Frac.	*0.8670*
Fuel Charge		HC Ratio	*1.8282*
Remarks:	*2007 Certification Diesel HD0521GP10*	OC Ratio	*0.0000*

Weather Limit Data

Test Data	FTP75	Operator	Dan Ogden	Speed Table		Date:	
Test Number	FTP75_20200115_06_TC1	Driver	Mario Michel	Shift Table	Auto	Cold Start	

Vehicle		**Dyno**		**Fuel**		**Test Timing**	
VIN	*1FT7W2BT9BEA15523*	Inertia [lb]	*9500.00*	2007 Certification Diesel HD0521GP10		Start Time	*12:51:38*
		A [lbf]	*61.469*	Fuel type	DIESEL	End Time	*14:07:50*
Model	F-250	B [lbf/mph]	*0.14073*	Density	*0.8542*		
Model Year	*2011*	C [lbf/mph2]	*0.049012*	NHV	18325	Soak Time	580.5
Engine Family	BFMXD06.761A			CWF	*0.8670*		
Displacement [l]	*6.700*						
Transmission	*Automatic*						
Odometer Start [mile]	*78749*	Flow Stream	Bag Only Diesel				
Odometer End [mile]	*78760*	Remark	FTP, Denve Baseline				

Bag Analysis

PHASE 1	THC [ppmC]	CO [ppm]	CO_2 [%]	NO_x [ppm]	CH_4 [ppm]	NMHC [ppm]				
Range	*100*	*250*	*2.000*	*30*	*60*		Temp. [°F]	76.11	Volume [scf]	7316
Zero Value	*0.00*	*0.1*	*0.0*	*0.0*	*0.0*		Press. [in Hg]	29.11	D.F.	*17.35*
Span Value	*94.91*	*239.17*	*1.899*	*24.699*	*57.400*		RH [%]	*37.86*	Ph. Start [s]	0.0
Sample	*5.97*	*27.79*	*0.718*	*2.712*	*0.986*	*4.860*	AH [g/kg]	*7.423*	Ph. End [s]	505.6
Mass.	*0.716*	*6.721*	*2730.754*	*0.973*	*0.137*	*0.583*	Dist. [mi]	*3.55*	Ph. Length [s]	505.7
Mass per Dist.	*0.2016*	*1.8918*	*768.578*	*0.2739*	*0.0385*	*0.1640*	NO_x Corr. F	*0.90*	Bag An. Del	*476*
							Dr. Viola.	*0*	Vio. Durat. [s]	0.0
							Crank [s]	*0.6*	FE [mile/gal]	13.2
SPC Mass Particles [g]	0.0024		SPC Mass per Dist. [g/mile]		0.0007					

PHASE 2	THC [ppmC1]	CO [ppm]	CO_2 [%]	NO_x [ppm]	CH_4 [ppm]	NMHC [ppm]				
Range	*100*	*250*	*2.000*	*30*	*60*		Temp. [°F]	78.38	Volume [scf]	10642
Zero Value	*0.00*	*0.2*	*0.0*	*0.0*	*0.0*		Press. [in Hg]	29.11	D.F.	*25.03*
Span Value	*94.91*	*238.87*	*1.903*	*24.680*	*57.400*		RH [%]	*36.23*	Ph. Start [s]	505.6
Sample	*0.49*	*-0.21*	*0.484*	*0.414*	*0.244*	*0.218*	AH [g/kg]	*7.660*	Ph. End [s]	1375.2
Mass.	*0.086*	*0.000*	*2678.455*	*0.218*	*0.049*	*0.038*	Dist. [mi]	*3.83*	Ph. Length [s]	869.7
Mass per Dist.	*0.0225*	*0.0000*	*699.540*	*0.0568*	*0.0128*	*0.0099*	NO_x Corr. F	*0.91*	Bag An. Del	*476*
							Dr. Viola.	*0*	Vio. Durat. [s]	0.0
									FE [mile/gal]	14.5
SPC Mass Particles [g]	0.0016		SPC Mass per Dist. [g/mile]		0.0004					

PHASE 3	THC [ppmC1]	CO [ppm]	CO_2 [%]	NO_x [ppm]	CH_4 [ppm]	NMHC [ppm]				
Range	*100*	*250*	*2.000*	*30*	*60*		Temp. [°F]	78.65	Volume [scf]	6184
Zero Value	*0*	*0.1*	*0.0*	*0.0*	*0.0*		Press. [in Hg]	29.10	D.F.	*18.06*
Span Value	*94.91*	*239.15*	*1.900*	*24.695*	*57.400*		RH [%]	*35.93*	Ph. Start [s]	1512.1
Sample	*0.98*	*4.93*	*0.691*	*1.309*	*0.284*	*0.663*	AH [g/kg]	*7.666*	Ph. End [s]	2017.8
Mass.	*0.100*	*1.010*	*2223.573*	*0.400*	*0.033*	*0.067*	Dist. [mi]	*3.56*	Ph. Length [s]	505.8
Mass per Dist.	*0.0281*	*0.2839*	*625.394*	*0.1125*	*0.0094*	*0.0189*	NO_x Corr. F	*0.91*	Bag An. Del	*489*
							Dr. Viola	*0*	Vio. Durat. [s]	0.0
							Crank [s]	*0.0*	FE [mile/gal]	16.3
SPC Mass Particles [g]	0.0004		SPC Mass per Dist. [g/mile]		0.0001					

SPC Mass Particles [g] SPC Mass per Dist. [g/mile]

Total Result (weighted)

Weighted	THC [g/mile]	CO [g/mile]	CO_2 [g/mile]	NO_x [g/mile]	CH_4 [g/mile]	NMOG [g/mile]	NMHC [g/mile]	NMHC+NO_x [g/mile]	HCHO [g/mile]	***Fuel Economy***	
Mass per Dist.	0.0611	*0.4695*	*693.48*	*0.1170*	*0.0172*	*0.0487*	*0.0443*	0.161	*0.0009*	mile/gal	*14.65*
Mass per Dist. - Particulate SPC	0.0004										

Total Result

actual	THC [g/mile]	CO [g/mile]	CO2 [g/mile]	NOX [g/mile]	CH4 [g/mile]	NMOG [g/mile]	NMHC [g/mile]	NMHC+NO_x [g/mile]	***Fuel Economy***	
Mass per Dist.	0.0825	*0.7068*	*697.86*	*0.1454*	*0.0200*	*0.0692*	*0.0629*	0.208	mile/gal	*14.55*
Mass per Dist. (rounded)	0.0825	*0.7068*	*697.9*	*0.1454*	*0.0200*	*0.069*	*0.0629*	0.208	Dist. [mi]	*10.94*
Mass per Dist. - Parti SPC [mg/mile]	0.4016									

CONFIDENTIAL

Date: 4/14/20

Accept _____ Reject _____

Signature: _____

CVS Data		Cycle data		Environmental Data	
Dilution Factor (Bag)	17.35	Vio. Dur.[s]	0.0	Rel. Hum.[%]	37.86
Dilution Factor (Modal)		Number	0	Ab. Hum.[g/lbs]	7.42
CVS Volume[scf]	7316.21	Act. Dist.[mi]	3.55	Pressure[inHg]	29.11
CVS Flow[scfm]	868.14			Temp.[°F]	76.11
CVS Inlet Pressure	28.56			Temp. Min.[°F]	74.84
CVS Inlet Temp.[°F]	108.06			Temp. Max.[°F]	77.18
CVS Inlet Temp. Min.[°F]	104.79			NO_X Corr. F	0.90
CVS Inlet Temp. Max.[°F]	117.54				

Particulate

SPC Particulate Results			Avg	Max	Min
Primary Filter Particle Mass [ug]	5.875	Temp Air Particlulate Dil [deg F]	93.1250		
Mass Particles [g]	0.00	Temp Gas Particulate [deg F]	111.8278	115.8727	109.8004
Massflow Particles [g/h]	1781008.00	Pressure Gas Particulate	0.2244	0.4032	0.0000
Mass per Dist. [g/mile]	0.0007	Dilution Ratio	1.0000		
Particulate Sampling Time [s]	505.70	Pressure Drop Pri Filter [mbar]	0.2881		
Primary Filter ID	A1				
Filter Diameter [mm]	47				

Bag

Concentrations	THC[ppmC]	CO[ppm]	CO_2[%]	NO_X[ppm]	CH_4[ppm]	NMHC[ppm]
Range	100	250	2.000	30	60	
Sniff	0.000	28.984	0.769	2.749	3.584	
Zero Value	0.003	0.123	-0.001	-0.003	0.000	
Zero Offset[%]	0.121	0.015	-0.002	0.005	-0.027	
Span Value	94.912	239.168	1.899	24.699	57.400	
Span Offset[%]	0.049	-0.023	-0.027	-0.139	-0.606	
Sample	10.617	28.312	0.769	2.781	2.965	7.267
Std. Dev.	0.000	0.009	0.004	0.034	0.000	
Ambient	4.927	0.559	0.054	0.073	2.100	
Std. Dev.	0.010	0.005	0.001	0.009	0.000	
Corrected	5.975	27.785	0.718	2.712	0.986	4.860
Mass	**THC[g]**	**CO[g]**	**CO_2[g]**	**NO_X[g]**	**CH_4[g]**	**NMHC[g]**
Uncorrected	0.7162	6.7214	2730.754	0.9730	0.1368	0.5826
Corrected	0.7162	6.7214	2730.754	0.9730	0.1368	0.5826
Mass per distance	**THC[g/mile]**	**CO[g/mile]**	**CO_2[g/mile]**	**NO_X[g/mile]**	**CH_4[g/mile]**	**NMHC[g/mile]**
Corrected for Lost Sample Mass	0.2016	1.8918	768.578	0.2739	0.0385	0.1640

Fuel Consumption

Fuel Consumption[g]	871.767	Fuel Consumption[l/100km]	17.849
Fuel Consumption[l]	1.021	**Fuel Economy[mile/gal]**	13.177

CVS Data		Cycle data		Environmental Data	
Dilution Factor (Bag)	25.03	Vio. Dur.[s]	0.0	Rel. Hum.[%]	36.23
Dilution Factor (Modal)		Number	0	Ab. Hum.[g/lbs]	7.66
CVS Volume[scf]	10642.08	Act. Dist.[mi]	3.83	Pressure[inHg]	29.11
CVS Flow[scfm]	734.27			Temp.[°F]	78.38
CVS Inlet Pressure	28.68			Temp. Min.[°F]	76.82
CVS Inlet Temp.[°F]	112.55			Temp. Max.[°F]	80.24
CVS Inlet Temp. Min.[°F]	108.52			NO_X Corr. F	0.91
CVS Inlet Temp. Max.[°F]	117.07				

Particulate

SPC Particulate Results			Avg	Max	Min
Primary Filter Particle Mass [ug]	4.359375	Temp Air Particlulate Dil [deg F]	91.9244		
Mass Particles [g]	0.00	Temp Gas Particulate [deg F]	111.9690	115.7749	111.3551
Massflow Particles [g/h]	1506740.13	Pressure Gas Particulate	0.0002	0.3387	0.0000
Mass per Dist. [g/mile]	0.0004	Dilution Ratio	1.0000		
Particulate Sampling Time [s]	869.60	Pressure Drop Pri Filter [mbar]	0.0250		
Primary Filter ID					
Filter Diameter [mm]					

Bag

Concentrations	THC[ppmC]	CO[ppm]	CO_2[%]	NO_X[ppm]	CH_4[ppm]	NMHC[ppm]
Range	100	250	2.000	30	60	
Sniff	0.000	1.052	0.537	0.516	2.698	
Zero Value	0.003	0.158	-0.002	-0.001	0.000	
Zero Offset[%]	0.121	0.009	-0.002	-0.002	-0.008	
Span Value	94.912	238.869	1.903	24.680	57.400	
Span Offset[%]	0.049	-0.016	-0.028	-0.234	-0.405	
Sample	5.044	0.217	0.535	0.493	2.260	2.490
Std. Dev.	0.000	0.007	0.002	0.016	0.000	
Ambient	4.740	0.444	0.053	0.082	2.100	
Std. Dev.	0.008	0.003	0.001	0.015	0.000	
Corrected	0.493	-0.209	0.484	0.414	0.244	0.218
Mass	THC[g]	CO[g]	CO_2[g]	NO_X[g]	CH_4[g]	NMHC[g]
Uncorrected	0.0862	0.0000	2678.455	0.2176	0.0491	0.0379
Corrected	0.7162	0.0000	2678.455	0.2176	0.0491	0.0379
Mass per distance	THC[g/mile]	CO[g/mile]	CO_2[g/mile]	NO_X[g/mile]	CH_4[g/mile]	NMHC[g/mile]
Corrected for Lost Sample Mass	0.0225	0.0000	699.540	0.0568	0.0128	0.0099

Fuel Consumption

Fuel Consumption[g]	851.158	Fuel Consumption[l/100km]	16.171
Fuel Consumption[l]	0.996	Fuel Economy[mile/gal]	14.544

CVS Data		Cycle data		Environmental Data	
Dilution Factor (Bag)	18.06	Vio. Dur.[s]	0.0	Rel. Hum.[%]	35.93
Dilution Factor (Modal)		Number	0	Ab. Hum.[g/lbs]	7.67
CVS Volume[scf]	6184.47	Act. Dist.[mi]	3.56	Pressure[inHg]	29.10
CVS Flow[scfm]	733.70			Temp.[°F]	78.65
CVS Inlet Pressure	28.68			Temp. Min.[°F]	75.20
CVS Inlet Temp.[°F]	113.03			Temp. Max.[°F]	81.32
CVS Inlet Temp. Min.[°F]	108.99			NO_X Corr. F	0.91
CVS Inlet Temp. Max.[°F]	119.25				

Particulate

SPC Particulate Results			Avg	Max	Min
Primary Filter Particle Mass [ug]	1.046875	Temp Air Particlulate Dil [deg F]	93.8904		
Mass Particles [g]	0.00	Temp Gas Particulate [deg F]	113.7876	120.4600	112.3817
Massflow Particles [g/h]	1505979.38	Pressure Gas Particulate	0.1491	0.3430	0.0000
Mass per Dist. [g/mile]	0.0001	Dilution Ratio	1.0000		
Particulate Sampling Time [s]	505.70	Pressure Drop Pri Filter [mbar]	0.2031		
Primary Filter ID					
Filter Diameter [mm]					

Bag

Concentrations	THC[ppmC]	CO[ppm]	CO_2[%]	NO_X[ppm]	CH_4[ppm]	NMHC[ppm]
Range	100	250	2.000	30	60	
Sniff	0.000	6.022	0.741	1.395	2.901	
Zero Value	0.003	0.087	-0.001	0.001	0.000	
Zero Offset[%]	0.121	0.020	-0.002	0.009	0.006	
Span Value	94.912	239.153	1.900	24.695	57.400	
Span Offset[%]	0.049	-0.005	-0.024	-0.163	-0.453	
Sample	6.182	5.264	0.741	1.385	2.381	3.492
Std. Dev.	0.000	0.003	0.004	0.017	0.000	
Ambient	5.503	0.349	0.052	0.081	2.220	
Std. Dev.	0.010	0.004	0.001	0.012	0.000	
Corrected	0.984	4.935	0.691	1.309	0.284	0.663
Mass	**THC[g]**	**CO[g]**	**CO_2[g]**	**NO_X[g]**	**CH_4[g]**	**NMHC[g]**
Uncorrected	0.0999	1.0096	2223.573	0.4000	0.0333	0.0673
Corrected	0.0999	1.0096	2223.573	0.4000	0.0333	0.0673
Mass per distance	**THC[g/mile]**	**CO[g/mile]**	**CO_2[g/mile]**	**NO_X[g/mile]**	**CH_4[g/mile]**	**NMHC[g/mile]**
Corrected for Lost Sample Mass	0.0281	0.2839	625.394	0.1125	0.0094	0.0189

Fuel Consumption

Fuel Consumption[g]	707.138	Fuel Consumption[l/100km]	14.468
Fuel Consumption[l]	0.828	**Fuel Economy[mile/gal]**	16.256

Test Data: FTP75 Operator: Dan Ogden Date: 1/15/2020
Test Number: FTP75_20200115_06_TC1 Driver: Mario Michel

Driver Violations

		Phase 1	Phase 2	Phase 3
Number of Violations	-	0	0	0
Duration of Violations	(s)	0.0	0.0	0.0

Number	Phase	Violation Begin (s)	Violation End (s)	Violation Duration (s)	Scheduled Speed (mph)	Max Speed Deviation (mph)
No Violations In This Test				0.0		

Test Record #: FTP75_20200115_06_TC1

Phase 1

Analyzer Adjust

	Range Number	Range	Zero Value	Zero Set Value	Zero Offset	Span Value	Span Set Value	Span Offset	ReZero Value
		ppm	ppm	ppm	%	ppm	ppm	%	ppm
CO_2	1	20000	-8.29	0.00	-0.04	18991.80	19010.00	-0.09	-0.06
CO	1	250	0.12	0.00	0.05	239.17	239.00	0.07	-0.05
NO_X	1	30	0.00	0.00	-0.01	24.70	24.70	0.00	0.00
THC (ppmC	1	100	0.00	0.00	0.00	94.91	94.89	0.02	0.14
CH_4	1	60	0.00	0.00	0.00	57.40	57.40	0.00	0.12
N2O				0.00					

Analyzer Check

	Range Number	Range	Zero Value	Zero Set Value	Zero Drift	Span Value	Span Set Value	Span Drift	2% Drift Validation
		ppm	ppm	ppm	%	ppm	ppm	%	
CO_2	1	20000	-0.32	0.00	0.00	19004.67	19010.00	0.06	
CO	1	250	0.04	0.00	0.03	238.94	239.00	-0.09	
NO_X	1	30	0.00	0.00	0.00	24.66	24.70	-0.14	
THC (ppmC	1	100	0.12	0.00	-0.02	94.94	94.89	0.03	
CH_4	1	60	-0.02	0.00	-0.23	57.04	57.40	-0.61	
N2O				0.00					

Phase 2

Analyzer Adjust

	Range Number	Range	Zero Value	Zero Set Value	Zero Offset	Span Value	Span Set Value	Span Offset	ReZero Value
		ppm	ppm	ppm	%	ppm	ppm	%	ppm
CO_2	1	20000	-15.41	0.00	-0.08	19027.80	19010.00	0.09	-0.14
CO	1	250	0.16	0.00	0.06	238.87	239.00	-0.05	-0.08
NO_X	1	30	0.00	0.00	0.00	24.68	24.70	-0.07	0.00
THC (ppmC	1	100	0.00	0.00	0.00	94.91	94.89	0.02	0.14
CH_4	1	60	0.00	0.00	0.00	57.40	57.40	0.00	0.15
N2O				0.00					

Analyzer Check

	Range Number	Range	Zero Value	Zero Set Value	Zero Drift	Span Value	Span Set Value	Span Drift	2% Drift Validation
		ppm	ppm	ppm	%	ppm	ppm	%	
CO_2	1	20000	-0.30	0.00	0.00	19004.41	19010.00	-0.12	
CO	1	250	0.02	0.00	0.04	238.96	239.00	0.04	
NO_X	1	30	0.00	0.00	-0.02	24.63	24.70	-0.17	
THC (ppmC	1	100	0.12	0.00	-0.02	94.94	94.89	0.03	
CH_4	1	60	0.00	0.00	-0.26	57.16	57.40	-0.41	
N2O				0.00					

Phase 3

Analyzer Adjust

	Range Number	Range	Zero Value	Zero Set Value	Zero Offset	Span Value	Span Set Value	Span Offset	ReZero Value
		ppm	ppm	ppm	%	ppm	ppm	%	ppm
CO_2	1	20000	-6.94	0.00	-0.03	19000.90	19010.00	-0.05	-0.37
CO	1	250	0.09	0.00	0.03	239.15	239.00	0.06	-0.04
NO_X	1	30	0.00	0.00	0.00	24.69	24.70	-0.02	0.00
THC (ppmC	1	100	0.00	0.00	0.00	94.91	94.89	0.02	0.14
CH_4	1	60	0.00	0.00	0.00	57.40	57.40	0.00	0.15
N2O				0.00					

Analyzer Check

	Range Number	Range	Zero Value	Zero Set Value	Zero Drift	Span Value	Span Set Value	Span Drift	2% Drift Validation
		ppm	ppm	ppm	%	ppm	ppm	%	
CO_2	1	20000	-0.36	0.00	0.00	19005.15	19010.00	0.02	
CO	1	250	0.05	0.00	0.04	238.99	239.00	-0.07	
NO_X	1	30	0.00	0.00	-0.01	24.65	24.70	-0.15	
THC (ppmC	1	100	0.12	0.00	-0.02	94.94	94.89	0.03	
CH_4	1	60	0.00	0.00	-0.25	57.13	57.40	-0.45	
N2O				0.00					

Emission Lab Test Report

Drive Cycle Energy Summary

Test Record #: FTP75_20200115_06_TC1

Test Cycle FTP75
Test Legislation EPA

Vehicle ID 1FT7W2BT9BEA15523

DYNO Data

	Road Load	Street Load
Inertia [lb]	*9500.00*	
A [lbf]	*61.469*	*80.650*
B [lbf/mph]	*0.14073*	*1.58910*
C [lbf/mph2]	*0.049012*	*0.038900*

	Phase1	Phase2	Phase3	Weighted
Distance				
Target	5779.17	6210.96	5779.17	
Driven	5718.58	6161.35	5722.52	
Distance Rating (%)	-1.0483	-0.7988	-0.9802	
Cycle Energy (MJ)				
Target	8.07	7.35	8.07	
Driven	7.78	6.97	7.72	
Distance per Energy Cycle (m/MJ)				
Target	715.91	845.05	715.91	777.46
Driven	734.83	884.56	741.48	807.71
Road Load Work Fraction				
Target	0.4674	0.3467	0.4674	
Driven	0.5123	0.3696	0.4957	
Inertial Work (MJ)				
Target	4.30	4.80	4.30	9.10
Driven	3.80	4.39	3.89	8.24
Inertial Work Fraction				
Target	0.5326	0.6533	0.5326	
Driven	0.4877	0.6304	0.5043	
Inertial Work Rating	-11.7232	-8.5541	-9.4622	-9.4424
Absolute Speed Change (m/s2)				
Target	204.82	340.96	204.83	545.79
Driven	188.83	322.40	190.69	512.29
Absolute Speed Change Rating (%)	-7.8041	-5.4454	-6.9027	-6.1377
Energy Rating	-2.6441	-4.6750	-3.5714	
Energy Economy Rating	-2.6441	-4.6750	-3.5714	-3.8921