

NVFEL Laboratory Test Data						CVS	
Final Laboratory Test Results							
Test Number: 2014-0071-011				Vehicle ID: E350 BLUETEC			
Test Information				MFR Name MERCEDES BENZ			
Test Date: 3/28/2014				MFR Codes: 200 MBX			
Key Start: 07:35:50				Config #: 00			
Fuel Container ID: F00022				Transmission: AUTO			
Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur				Shift Schedule: A09980041			
Test Procedure: 89 us062bag (us06warmup_2bagus06)				Beginning Odometer: 000000.0 MI			
Calculation Method: Diesel				Drive Schedule: us06warmup_2bagus06			
Pretest Remarks:							
Bag Data							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NonMeth HC</u>	
Phase 1	(ppmC)	(ppm)	(ppm)	(%)	(ppm)	(ppmC)	
Sample	2.751 / 2.555	0.971	5.529	1.071	2.132		
Ambient	2.477	0.248	0.041	0.046	2.017		
Net Concentration	0.472 / 0.276	0.743	5.491	1.028	0.276	-0.020	
Remarks:							
Phase 2							
Sample	2.648 / 2.513	1.125	1.750	1.202	2.083		
Ambient	2.467	0.234	0.035	0.046	2.013		
Net Concentration	0.402 / 0.267	0.912	1.718	1.160	0.250	-0.002	
Remarks:							
Phase 3							
Sample							
Ambient							
Net Concentration							
Remarks:							
Phase 4							
Sample							
Ambient							
Net Concentration							
Remarks: This test has particulate results.							
Results							
	<u>THC / IntTHC</u>	<u>CO</u>	<u>NOx</u>	<u>CO2</u>	<u>CH4</u>	<u>NMHC</u>	<u>Vol MPG</u>
	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(gpm)	(mpg)
Phase 1	- / 0.005	0.026	0.283	563.5	0.006	0.000	18.157
Phase 2	- / 0.002	0.014	0.039	276.8	0.002	0.000	36.966
Composite	0.00262	0.01652	0.09285	340.266	0.00292	0.00000	
Fuel Economy							
	<u>Diesel MPG</u>				<u>Dyno Settings</u>	<u>Dyno #:</u> D329 - RWD	
Phase 1	18.06					Inertia: 4500	
Phase 2	36.76					EPA Set Co A: 16.62	
						EPA Set Co B: -0.4083	
						EPA Set Co C: 0.02307	
Composite	29.93					Emiss-Bench: Mexa 7200dle	



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Results	THC / IntTHC (grams)	CO (grams)	NOx (grams)	CO2 (grams)	CH4 (grams)	NMHC (grams)	Meth Response
Phase 1	- / 0.008	0.046	0.502	997.0	0.010	0.000	1.075
Phase 2	- / 0.012	0.086	0.240	1722.0	0.014	0.000	

Test Conditions

	Phase 1	Phase 2	Phase 3	Phase 4
Barometer (inHg)	28.64	28.64		
Avg Cell Temp (degF)	74.15	74.09		
Dew Point (degF)	47.80	48.03		
Specific Humidity (grains/lbm)	51.49	51.95		
NOx Corr Factor	0.9005	0.9023		
CO2 Dilution Factor	12.509	11.148		
CFV Vmix (scf @68F)	1857.94	2846.26		
Total CVS Vmix (scf@68F)	1871.17	2866.50		
CVS Flow Rate Avg (scfm)	469.37	467.88		

Fan Placement: One Large Fan - Up - Front (US06 Only)

Phase Time (secs)	130.00	365.00	107.50
Distance (miles)	1.769	6.222	
Bag Analysis Time (secs)	58.4	239.9	

	US06-C	US06-H	US06-T
IWR % diff	-2.124	-11.848	-6.856
ASCR % diff	-1.358	-9.048	-3.794
EER	-2.029	-2.393	-2.260

NVFEL Laboratory Test Data						PARTICULATE		
Final Laboratory Test Results								
Test Number: 2014-0071-011						Vehicle ID: E350 BLUETEC		
<div style="display: flex; align-items: center;"> <div> Test Information Test Date: 3/28/2014 Key Start: 07:35:50 Fuel Container ID: F00022 Fuel Type: 19 Cert Diesel 7-15 ppm Sulfur Test Procedure: 89 us062bag (us06warmup_2bagus06) Calculation Method: Diesel Pretest Remarks: </div> </div>						MFR Name: MERCEDES BENZ MFR Codes: 200 MBX Config #: 00 Transmission: AUTO Shift Schedule: A09980041 Beginning Odometer: 000000.0 MI Drive Schedule: us06warmup_2bagus06		
All filter weights are corrected for buoyancy.								
Particulate	Filter Sampler	Filter No.	Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Total Mass mg	Total Mass mg / mi	Filter comment
Phase 1	A	789121	141.7194	141.7254	0.00604	2.564	0.321	Median
	B	789122	141.4123	141.4171	0.00484	2.055	0.257	Median
	C	789123	141.2031	141.2062	0.00304	1.292	0.162	Median
Remarks: . . .								
Phase 2								
Remarks: . . .								
Phase 3								
Remarks: . . .								
Phase 4								
Remarks: <u>This test has particulate results.</u>								
Average Results					Net Wt mg	Total Mass mg	Total Mass mg / mi	
Phase 1					0.00464	1.970	0.247	
All filter weights are corrected for buoyancy.								
Reference Filter Stability Check			Tare (Pre Wt)	Gross (Post Wt)	Net Wt mg	Stability Check PASS/FAIL	Dyno #: D329 - RWD Inertia: 4500	
2% of Avg Net or 0.01 mg		No.						
0.01		1	141.97848	141.97921	0.00073	PASS	EPA Set Co A: 16.62	
		2	143.45161	143.45123	-0.00038	PASS	EPA Set Co B: -0.4083	
							EPA Set Co C: 0.02307	
Emissions Bench Mexa 7200dle								
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NVFEL Laboratory Test Data
Final Laboratory Test Results

PARTICULATE

Test Number: 2014-0071-011

Vehicle ID: E350 BLUETEC

<u>WEIGHING CHAMBER</u>	<u>Buoyancy</u>	<u>Operator</u>	<u>Chamber Temp</u>	<u>Dew Point</u>	<u>Barometer</u>	<u>Last Change in Status</u>	
Timestamp	Factor	(id)	(°F)	(°F)	("Hg)	Status @ times tamp	
Pre-test	3/25/14 9:12	1.0011083	022298	72.2	49.4	28.96	NORM @ 03/21/14 18:56:11
Post-test	3/28/14 10:37	1.0010994	022298	72.2	49.2	28.72	NORM @ 03/27/14 21:36:39

20140325091117 - 2014/03/28 08:15:00 - 2014/03/28 10:45:02 - 00 02:30

<u>Test Conditions</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Phase 3</u>	<u>Phase 4</u>
Barometer (inHg)	28.64	28.64		
Avg Cell Temp (degF)	74.15	74.09		
Dew Point (degF)	47.80	48.03		
Specific Humidity (grains/lbm)	51.49	51.95		
NOx Corr Factor	0.9005	0.9023		
Dilution Factor	12.51	11.15		
CFV Vmix (scf @68F)	1857.94	2846.26		
Sample Volume A (scf @68F)	11.160	6.757		
Sample Volume B (scf @68F)	11.163	6.750		
Sample Volume C (scf @68F)	11.150	6.733		
Sample Volume D (scf @68F)				
Sample Volume Average (scf @68F)	11.158	6.747		
Total PM Vmix (scf @68F)	1871.17	2866.50		
Phase Time (sec)	130.00	365.00	107.50	
Distance (miles)	1.769	6.222		
PSU Probe A (degC)				
PSU Probe B (degC)				
PSU Probe C (degC)				
PSU Dil Air A (degC)	43.4	43.4		
PSU Dil Air B (degC)	41.4	41.3		
PSU Dil Air C (degC)	42.7	42.8		
PSU Filter A (degC)	46.5	46.3		
PSU Filter B (degC)	46.2	46.5		
PSU Filter C (degC)	47.6	47.6		
PSU Dil Flow A (lpm)	19.8	19.7		
PSU Dil Flow B (lpm)	19.8	19.7		
PSU Dil Flow C (lpm)	19.8	19.7		
PSU A Proportionality .				
PSU B Proportionality .				
PSU C Proportionality .				

SUGGESTED CITATION: 2013 Mercedes E350 BlueTEC Vehicle Diesel Fuel – Test Data Package. Version 2018-07. Ann Arbor, MI:
US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.