EPA Gasoline Particulate testing

D. Good
7/23/2008

Veh No	Mfr	Vehicle ID	Model Year	Carline	Engine	Test Group
1	VW/Audi	7385-DAQ/00	2007	Audi S8	5.2-liter V-10 SIDI	7ADXV05.2385
		(Cert vehicle)				
		Dyno 329				
2	BMW	TL88008/00	2007	Mini Cooper S	1.6L Turbo SIDI	7BMXV01.6LE2
		(Cert vehicle)				
		Dyno 329				
3	Toyota	08-UFH2/02	2008	Lexus LS600hL	5.0L V8 SIDI	8TYXV05.0CC4
		(Cert vehicle)		(Hybrid)		
		Dyno 329				
4	GM	68DN4082		Cadillac CTS/STS	3.6L V6 SIDI	8GMXV03.6053
		(Cert vehicle)				
		Dyno 329				
4	GM	68DN4082	2008	Cadillac CTS/STS	3.6L V6 SIDI	8GMXV03.6053
	(correlation)					
4	GM	68DN4082	2008	Cadillac CTS/STS	3.6L V6 SIDI	8GMXV03.6053
	(correlation retest)					
4	GM	68DN4082	2008	Cadillac CTS/STS	3.6L V6 SIDI	8GMXV03.6053
	(correlation retest)					
5	BMW	TD87046	2007	Mini Cooper S	1.6L Turbo	7BMXV01.6R52
		(Cert vehicle)		Convertible		
		Dyno 329				
6	Chrysler	K150RXX-0025	2005	PT Cruiser	2.4L Turbo	5CRXV02.4VE1
		(In-use vehicle)				
		Dyno 329				
7	Chrysler	K150RXX-0046	2005	PT Cruiser	2.4L Turbo	5CRXV02.4VE1
		(In-use vehicle)				
		Dyno 329				

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8	Chrysler	K151RXX-0022	2005	PT Cruiser	2.4L Turbo	5CRXV02.4VE1
		(In-use vehicle)				
		Dyno 329				
9	Volvo	200812	2008	XC70	3.2L	8VVXB03.2U2N
		(Cert vehicle)				
		Dyno 329				
10	Ford	0L12ASD-0070	2001	F150 4-dr	5.4L	1FMXT05.4PF5
		(In-use vehicle w/high oil consumption)				(2TWC/2HOS/EGR/SFI)
		Dyno 001				
10	Ford	0L12ASD-0070	2001	F150 4-dr	5.4L	1FMXT05.4PF5
	(retest)	(In-use vehicle w/high oil consumption)				(2TWC/2HOS/EGR/SFI)
		Dyno 329				
11	Chevrolet	OL10ASD-0049	2001	Silverado 2500 4-dr	6.0L	1GMXHO6.0593
		(In-use vehicle w/high oil consumption)				
		Dyno 001				
11	Chevrolet	OL10ASD-0049	2001	Silverado 2500 4-dr	6.0L	1GMXHO6.0593
	(retest)	(In-use vehicle w/high oil consumption)				
		Dyno 329				
12	Toyota	OIL8/ASD/0167	2002	Corolla	1.8L	2TYXV01.8FFA
		(In-use vehicle w/high oil consumption)				
		Dyno 001				
12	Toyota	OIL8/ASD/0167	2002	Corolla	1.8L	2TYXV01.8FFA
	(retest)	(In-use vehicle w/high oil consumption)				
		Dyno 001				
13	Toyota	OIL8/ASD/0071	2002	Corolla	1.8L	2TYXV01.8FFA
		(In-use vehicle w/high oil consumption)				
		Dyno 001				
13	Toyota	OIL8/ASD/0071	2002	Corolla	1.8L	2TYXV01.8FFA
	(retest)	(In-use vehicle w/high oil consumption)				
		Dyno 001				
14	GM	2018AN8050	2008	HHR	2.0L turbo	8GMXV02.0021
		(Cert vehicle)				
		Dyno 329				
15	Ford	8P51-3.5-C-503	2008		3.5L	

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		(Cert vehicle)				
		Dyno 329				
16	VW	L151RXX-0135	2006	Passat	2.0L Turbo SIDI	6ADXV02.0366
		(In-use vehicle)				
		Dyno 329				
17	VW	L151RXX-0463	2006	Passat	2.0L Turbo SIDI	6ADXV02.0366
		(In-use vehicle)				
		Dyno 329				
18	VW	L151RXX-0611	2006	Passat	2.0L Turbo SIDI	6ADXV02.0366
		(In-use vehicle)				
		Dyno 329				
19	BMW	LZ42732	2009	X6	4.4L V8 SIDI Turbo	8BMXT04.4E71
		(Cert vehicle)				
		Dyno 329				
20	Toyota	09-AA1A	2009	RAV4 2WD	2.5L SPFI	9TYX02.5BEH
		(Cert vehicle)			(not SIDI)	
		Dyno 329				
	* Notes: 1. Composite calculated without SC03 test (.72 x FTP + .28 x US06).					
	2. US06 & highway hydrocarbon units are NMHC.					

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	EPA Testing										Mfr Testing			PM Std	
Em Std (Bin)	Odometer (miles)	EPA Test Date	Test Type	Test Fuel	Pass Fail	NMOG* (g/mi)	CO (g/mi)	NOx (g/mi)	PM (mg/mi)	PM Comp*	Mfr Test Date	PM (mg/mi)	PM Comp*	50K/120K (mg/mi)	Comments
Bin 5	5,048	1/19/2007	FTP	Indolene	P	0.0549	0.48	0.326	5.2		Fall, 2006	2.3		10	Mfrs PM test performed on same vehicle
		1/19/2007	Hwy	Indolene	NA	0.0042	0.53	0.019	1.2					NA	
		1/19/2007	US06	Indolene	P	0.0607	1.48	0.072	9.2	6.3	Fall, 2006	25.0	8.7	70 Comp	
Bin5	4,370	1/31/2007	FTP	Indolene	P	0.0260	0.25	0.016	5.3		No mfr PM data until afer EPA tests			10	Filter C not used- filter temp to high (60-66deg C)
		1/31/2007	US06	Indolene	P	0.0240	1.34	0.004	9.3	6.4				70 Comp	Filter C not used- filter temp to high (60deg C)
Bin 3/PZEV	4,406	2/27/2007	FTP	Indolene	P	0.0076	0.18	0.002	3.6		No mfr PM data until afer EPA tests			10	Cert veh
		2/27/2007	Hwy	Indolene		0.0000	0.00	0.014	0.9					NA	
		3/7/2007	US06	Indolene	P	0.0140	0.30	0.021	4.5	3.9				70 Comp	
Bin5	4,168	3/1/2007	FTP	Indolene	P	0.0334	0.66	0.039	5.2		2/15/07	2.6		10	Cert veh - select shifted as a manual trans
		3/1/2007	Hwy	Indolene		0.0210	0.33	0.003	1.1						
		3/1/2007	US06	Indolene	P	0.1110	7.46	0.023	10.3	6.7	2/16/07	9.6	4.6	70 Comp	
Bin5	4,467	3/28/2007	FTP	Indolene	P	0.0290	0.54	0.027	5.2					10	Correlation testing - Driver A
		3/28/2007	Hwy	Indolene	P	0.0187	0.28	0.006	0.7						Correlation testing - Driver A
		3/28/2007	US06	Indolene	F	0.1050	8.40	0.035	6.6	5.6				70 Comp	Correlation testing - Driver A
Bin5	4,514	3/29/2007	FTP	Indolene	P	0.0327	0.62	0.028	4.4					10	Correlation testing - Driver B
		3/29/2007	Hwy	Indolene	P	0.0146	0.25	0.003	0.6						Correlation testing - Driver B
		3/29/2007	US06	Indolene	P	0.0707	6.11	0.025	2.8	3.9				70 Comp	Correlation testing - Driver B
Bin5	4,562	3/30/2007	FTP	Indolene	P	0.0270	0.37	0.023	4.6					10	Correlation testing - Driver A
		3/30/2007	Hwy	Indolene	P	0.0094	0.19	0.004	0.6						Correlation testing - Driver A
		3/30/2007	US06	Indolene	P	0.0686	5.46	0.034	5.8	5.0				70 Comp	Correlation testing - Driver A
	4,631	4/13/2007	US06	Indolene	P	0.0780	6.10	0.033	4.6	4.6				70 Comp	Correlation testing - Driver A
Bin 5	4,193	4/19/2007	FTP	Indolene	P	0.0638	2.57	0.028	2.9					10	Probe A,B & C Temps not available
		4/19/2007	Hwy	Indolene	P	0.0010	0.57	0.007	0.7						Probe A,B & C Temps not available
		4/19/2007	US06	Indolene	F	0.0333	11.87	0.021	3.1	2.9				70 Comp	Failed US06 due to insufficient cooling to intercooler
Bin 5	24,508	5/11/2007	FTP	Indolene	P	0.0394	0.62	0.016	1.0					10	In-use surv. VIN=3C8FY68845T528164
		5/11/2007	Hwy	Indolene	P	0.0031	0.17	0.003	0.4						
		5/11/2007	US06	Indolene	P	0.0083	0.56	0.049	3.9	1.8				70 Comp	
Bin 5	32,776	5/11/2007	FTP	Indolene	P	0.0414	0.66	0.012	1.6					10	In-use surv. VIN=3C8FY68865T537156
		5/11/2007	Hwy	Indolene	P	0.0042	0.13	0.004	4.2						Note: hwy PM was higher than FTP
		5/23/2007	US06	Indolene	P	0.0208	6.47	0.029	9.1	3.7				70 Comp	

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Bin 5	65,511	5/15/2007	FTP	Indolene	P	0.0493	0.67	0.026	1.4					10	In-use surv. VIN=3C8FY68815T580691
		5/15/2007	Hwy	Indolene	P	0.0031	0.09	0.002	4.1						Note: hwy PM was higher than FTP
		5/22/2007	US06	Indolene	P	0.0146	3.81	0.026	6.4	2.8				70 Comp	
Bin 5	4,411	5/30/2007	FTP	Phase II	P	0.0270	0.15	0.028	2.3					10	Cert veh
		5/30/2007	Hwy	Phase II	P	0.0025	0.009	0.004	0.9						
		5/30/2007	US06	Phase II	P	0.0244	0.51	0.114	4.5	2.9				70 Comp	
LDT4 LEV	76,004	6/14/2007	FTP	Indolene	P	.110 THC	1.03	0.082	3.1					120	VIN 1FTRW07L21KA54573
		6/14/2007	Hwy	Indolene	P	0.0029	0.24	0.011	1.2					NA	Burns one quart every 1500-3000 miles
		6/14/2007	US06	Indolene	NA	0.1550	14.03	0.017	50.5	16.4				NA	
LDT4 LEV	76,051	6/15/2007	FTP	Indolene	P	0.1470	1.34	0.087	2.3					120	VIN 1FTRW07L21KA54573
		6/15/2007	Hwy	Indolene	P	0.0104	0.11	0.002	2.0					NA	Burns one quart every 1500-3000 miles
		6/15/2007	US06	Indolene	NA	0.0333	5.39	0.020	25.1	8.7				NA	
HDV	52,609	6/12/2007	FTP	Indolene	NA	.294 THC	1.63	0.317	3.9					NA	HDV - Certified to Engine Dyno standards
			Hwy	N/A	NA	N/A	N/A	N/A	N/A					NA	VIN 1GTGK13U91F161636
		6/12/2007	US06	Indolene	NA	0.1747	2.24	0.226	61.3	20.0				NA	Burns one quart every 1000-1500 miles
HDV	52,632	6/14/2007	FTP	Indolene	NA	0.2861	1.46	0.296	6.2					NA	HDV - Certified to Engine Dyno standards
		6/14/2007	Hwy	Indolene	NA	0.0239	0.35	0.070	4.1					NA	VIN 1GTGK13U91F161636
		6/14/2007	US06	Indolene	NA	0.1030	1.61	0.231	49.3	18.3				NA	Burns one quart every 1000-1500 miles
NLEV-LEV	75,655	7/12/2007	FTP	Indolene	F	.103 THC	1.29	0.128	3.3					80	Likely failed NMOG (Passed PM)
		7/12/2007	Hwy	Indolene	P	.007 THC	0.12	0.061	5.9					NA	VIN 1NXBR12E32Z582535
		7/12/2007	US06	Indolene	P	.159 THC	4.94	0.364	28.9	10.5				NA	Burns one quart every 1000-1500 miles
NLEV-LEV	75,705	7/13/2007	FTP	Indolene	F	.135 THC	1.78	0.118	2.9					80	Failed NMOG (Passed PM)
		7/13/2007	Hwy	Indolene	P	.006 THC	0.12	0.048	3.1					NA	VIN 1NXBR12E32Z582535
		7/13/2007	US06	Indolene	P	.151 THC	4.79	0.355	18.7	7.4				NA	Burns one quart every 1000-1500 miles
NLEV-LEV	68,755	7/11/2007	FTP	Indolene	P	.076 THC	0.93	0.130	1.9					80	VIN 2T1BR12E72C550110
		7/11/2007	Hwy	Indolene	P	.007 THC	0.14	0.047	2.7					NA	Burns one quart every 2000-3000 miles
		7/11/2007	US06	Indolene	P	.104 THC	5.59	0.318	12.1	4.7				NA	
NLEV-LEV	68,794	7/12/2007	FTP	Indolene	P	.079 THC	0.87	0.129	1.0					80	VIN 2T1BR12E72C550110
		7/12/2007	Hwy	Indolene	P	.006 THC	0.14	0.054	1.5					NA	Burns one quart every 2000-3000 miles
		7/12/2007	US06	Indolene	P	.066 THC	2.44	0.374	7.3	2.8				NA	
Bin 5	4179	7/25/2007	FTP	Indolene	P	0.0679	1.17	0.024	6.4					10	
	4190	7/25/2007	Hwy	Indolene	P	0.0004	0.55	0.005	2.1						
	4211	7/25/2007	US06	Indolene	V	0.0305	2.36	N/A	6.9	6.5				70 Comp	US06 Nox span failure. US06 portion voided
Bin 5	5111	8/8/2007	FTP	PhaseII	P	.008 THC	0.23	0.006	2.3					10	

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	5122	8/8/2007	Hwy	Phase II	P	0.0 THC	0.03	0.000	0.9						
	5143	8/8/2007	US06	Phase II	V	N/A	N/A	N/A	12.7	5.2				70 Comp	No Hwy emission data - Particulate o.k.
Bin 5	59,363	5/8/2008	FTP	Indolene	P	0.0283	0.23	0.031	3.5					10	VIN WVWAK73C06P042021
	59,411	5/8/2008	Hwy	Indolene	P	0.0010	0.14	0.003	0.6						Specially recruited w/odo > 40,000 miles
	59,395	5/8/2008	US06	Indolene	P	0.0410	5.70	0.020	12.1	5.9				70 Comp	
Bin 5	49,856	5/13/2008	FTP	Indolene	F	0.0378	0.37	0.105	4.4					10	Failed NOx (passed PM)
	49,868	5/13/2008	Hwy	Indolene	P	0.0020	0.17	0.005	1.4						
	49,888	5/13/2008	US06	Indolene	P	0.0240	5.94	0.033	15.6	7.5				70 Comp	
Bin 5	42,137	5/29/2008	FTP	Indolene	P	0.0148	0.31	0.021	4.2					10	Passed all standards
	42250	6/6/2008	Hwy	Indolene	P	0.0010	0.07	0.003	1.5						
	42270	6/6/2008	US06	Indolene	P	0.0160	4.06	0.044	16.6	7.7				70 Comp	
Bin 5	4294	5/30/2008	FTP	Indolene	P	0.0328	0.42	0.023	3.7					10	Passed all standards
	4305	5/30/2008	Hwy	Indolene	P	0.0090	0.46	0.002	0.6						
	4327	5/30/2008	US06	Indolene	P	0.0950	1.63	0.012	5.8	4.3				70 Comp	
Bin 5	4001	6/13/2008	FTP	Indolene	P	0.0168	0.15	0.013	0.7					10	Passed all standards; (no EPA US06 test)
	3973	6/4/2008	Hwy	Indolene	P	0.0000	0.03	0.008	0.9						

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Diesel Vehicles (for comparison)

No

Mfr	Vehicle ID	Model Year
Mercedes	W211DE30-Z7033/00	2007
Mercedes	V251DE30-Z7047/00	2007
Chrysler	L7WKT1442	2007
Cummins	196M90	2007
VW	VW351 780169/09 (cert)	2009

* Notes: Composite calculated without SC03 test (.72 xFTP+ .28xUS06)

								EPA
								EPA
Carline	Engine	Test Group	Em Std (Bin)	Odometer (miles)	EPA Test Date	Test Type	Test Fuel	Pass Fail
E320 BluTec	3.0L V-6 w/trap, etc	7MBXV03.0BN8	Bin 8	4892	12/13/2006	FTP	ULSDiesel	P
					12/15/2006	FTP	ULSDiesel	P
					12/13/2006	Hwy	ULSDiesel	NA
					12/20/2006	Hwy	ULSDiesel	NA
R320 CDI	3.0L V-6 w/trap, etc	7MBXv03.0B10	Bin 10	4315	10/12/2006	FTP	ULSDiesel	P
					10/12/2006	Hwy	ULSDiesel	NA
Grand Cherokee	3.0L V-6 w/trap, etc	7CRXT03.0PRW	Bin 10	4051	10/4/2006	FTP	ULSDiesel	P
					10/6/2006	FTP	ULSDiesel	P
					10/4/2006	Hwy	ULSDiesel	NA
Dodge Ram 3500	408 CID	7CDXK040848W		4788	11/16/2006	FTP	ULSDiesel	P
						Hwy	ULSDiesel	NA
Passat	2.0L	9VWXV02.035N	Bin 5	4377	5/20/2008	FTP	ULSDiesel	P
				4388		Hwy	ULSDiesel	P
						US06	ULSDiesel	P

Testing					Mfr Testing			PM Std
Testing					Mfr Testing			PM Std
NMOG (g/mi)	CO (g/mi)	NOx (g/mi)	PM (mg/mi)	PM Comp*	Mfr Test Date	PM (mg/mi)	PM Comp*	50K/120K (mg/mi)
			1.2					20
			0.9					20
			0.6					NA
			0.5					NA
			2.0			8.0		80
			0.6					
			2.6			0.0		80
			1.5					80
			1.0					
			2.1					
			1.2					
0.0050	0.12	0.008	1.1		1/11/2008			10
0.0000	0.01	0.005	0.2					
0.0040	0.02	0.125	0.2	0.8				70 Comp

Comments

PM not measured on EPA US06 test

No SFTP PM standard for Interim T2 vehs

No SFTP PM standard for Interim T2 vehs