Data: California Environmental Engineering Dyno Test

California Environmental Engineering
2530 S. Birch Street. Santa Ana California
EPA78 WITH HHC

TEST NUMBER	V6006869	DATE	02-25-2016	RANGE	AUTO
VEHICLE REF	1500009-2	A.C.	YES	FUEL TYPE	DIESEL
V.I.N.	3C63R3HL5GG151075	ENGINE FAM.	GCEXD06.78WV	DENSITY	16.33
OPERATOR	ALEX HERRERA	EVAP.FAM.		SPECIF. CO2	13.4
DRIVER	RENE ACOSTA			Gr.C/gal.	2824
MAKE	DODGE	TEST TYPE	EPAAMD_1.LA4	FUEL Fract.	.866
MODEL	RAM 3500	SHIFT FILE	AUTO .L_4	SP. GRAVITY	.74
YEAR	2016	INERTIA WGT	10000	N.H.V.	20000
TANK CAP	40%=12.8	F0_SET_SAE	48.76	WT FACTOR	.43
ODOMETER	6414.6	F1_SET_SAE	0.6095	WT FACTOR	.1
TRANS.	AUTO	F2_SET_SAE	0.03910	WT FACTOR	.57
REMARKS					
REMARKS					
REMARKS					
START TIME	14:47:43	END TIME	15:29:05	FINAL ODO.	6425.8

#	EVENT	MILES	Km	TIME	TIME trace	HOLD	TIME trace	ERROR	GrCtrl
1	Ready	0.000	0.000	0.2	0.0 for	0.0	0.0 for	0.0	2049
2	Delay 10	0.000	0.000	10.0	0.0 for	0.0	0.0 for	0.0	2049
3	Ready	0.000	0.000	0.4	0.0 for	0.0	0.0 for	0.0	2329
4	CRANK	0.000	0.000	2.0	0.0 for	0.0	0.0 for	0.0	2843
5	phase 1	3.642	5.854	505.0	0.0 for	0.0	0.0 for	0.0	19219
6	phase 2	3.896	6.261	864.0	0.0 for	0.0	0.0 for	0.0	3875
7	eng off	0.000	0.000	12.6	0.0 for	0.0	0.0 for	0.0	3883
8	phase 2	0.000	0.000	5.0	0.0 for	0.0	0.0 for	0.0	3875
9	soak+bl	0.000	0.000	15.0	0.0 for	0.0	0.0 for	0.0	775
10	soak	0.012	0.020	525.0	0.0 for	0.0	0.0 for	0.0	3
11	ready	0.000	0.000	20.2	0.0 for	0.0	0.0 for	0.0	3
12	crank 3	0.000	0.000	1.3	0.0 for	0.0	0.0 for	0.0	2883
13	phase 3	3.613	5.807	505.0	0.0 for	0.0	0.0 for	0.0	2883
14	delay15	-0.000	-0.000	15.0	0.0 for	0.0	0.0 for	0.0	3
15	bags	0.000	0.000	1.0	0.0 for	0.0	0.0 for	0.0	7

TEST COMPLETED 2469.1 SECONDS DVT= 0.3

PHASE 1	THC	CO	NOx	CO2	CH4			
SAMPLE	4.55	4.3	12.1	1.005	1.76	Tdry= 78.8	Tdp = 37.3	
MODAL	4.55	5.0	12.0	0.984	1.69	BARO.= 754.70	SEC = 507.4	
AMBIENT	2.50	1.6	1.6	0.041	1.16	TQavg= -0.20	A-H = 32.8	
GRAMS	0.170	0.434	2.242	2340.62	0.159	NoxKf= 0.835	VOLC= 4667.9	
GMS/MI	0.047	0.119	0.616	642.68	0.044	M.P.G. 16.09	DF = 13.322	
G/Mwgt	0.010	0.025	0.128	133.53	0.009	MPGnhv 13.16	MI = 3.642	
						R-H = 22.40	KM = 5.854	

PHASE 2	THC	CO	NOx	CO2	CH4			
SAMPLE	4.43	1.4	0.6	0.629	1.86	Tdry= 78.8	Tdp = 37.4	
MODAL	4.43	2.9	0.7	0.617	1.91	BARO.= 754.70	SEC = 881.6	
AMBIENT	1.80	0.9	0.3	0.042	1.85	TQavg= -0.20	A-H = 33.0	
GRAMS	0.354	0.143	0.114	2446.18	0.353	NoxKf= 0.835	VOLC= 8010.2	
GMS/MI	0.091	0.037	0.029	627.87	0.091	M.P.G. 16.47	DF = 21.284	
G/Mwgt	0.045	0.018	0.015	313.93	0.045	MPGnhv 13.48	MI = 3.896	
						R-H = 22.50	KM = 6.262	

PHASE 3	THC	CO	NOx	CO2	CH4			
SAMPLE	2.41	2.4	2.9	0.878	1.40	Tdry= 78.9	Tdp = 37.3	
MODAL	2.41	1.7	2.6	0.861	1.48	BARO.= 754.70	SEC = 506.3	
AMBIENT	2.40	1.5	0.1	0.045	1.25	TQavg= -0.20	A-H = 32.8	
GRAMS	0.012	0.151	0.582	1987.84	0.011	NoxKf= 0.835	VOLC= 4586.2	
GMS/MI	0.003	0.042	0.161	550.19	0.003	M.P.G. 18.80	DF = 15.254	
G/Mwgt	0.001	0.011	0.044	150.90	0.001	MPGnhv 15.38	MI = 3.613	
						R-H = 22.40	KM = 5.807	

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WEIGHTED	THC	CO	NOx	CO2	CH4			
GRAMS/MI	0.058	0.055	0.187	609.64	0.057	FUEL ECONOMY		
GRAMS/KM	0.036	0.034	0.116	379.29	0.034	M.P.G. 16.96	NHVmpg 13.880	
						L/100k 13.87	NHVkpl 5.902	

Factor	Without Eco	w/ EPEC or Eco	%Δ
Totally Hydrocarbons (THCs) g/mi	0.047	0.003	-93.6%
Nitrous Oxide (NOx) g/mi	0.616	0.161	-73.9%
Carbon Monoxide (CO) g/mi	0.119	0.042	-64.7%
Methane (CH4) g/mi	0.044	0.003	-93.2%
Average Fuel Consumption	16.1 mpg	18.8 mpg	**16.8%**