

Manufacturer	Environmental Protection Agency	Manufacturer Code	EPA
Test Group	GEPAV02.OFFV	Evaporative/Refueling Family	GEPAR0250ABC
Certificate Number	N/A	CARB Executive Order #	N/A
Certificate Issue Date	N/A	Certificate Revision Date	N/A
Certificate Effective Date	N/A	Conditional Certificate	--
CSI Revision #	N/A	CSI Submission/Revision Date	02/12/2015
Model Year	2016		

Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	N/A
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Multipoint/sequential fuel injection	N
Ethanol	Multipoint/sequential fuel injection	N

Hybrid Indicator	No		
Multiple Fuel Storage	Fuels Stored Together	Rechargeable Energy Storage System Indicator	No
Multiple Fuel Combustion	Fuels Combusted Together	Off-board Charge Capable Indicator	No
Fuel Cell Indicator	No	EPA Vehicle Class	LDV
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	GEPAGPGNND5A	Durability Group Equivalency Factor	1
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
SFTP Federal Composite Compliance Identifier	Tier 3	SFTP Tier 2 Composite CO Option	--
SFTP LEV-III Composite Compliance Indicator	Yes		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	GEPAV02.0VD9
Mfr Test Group Comments	FFV TEST GROUP		
Mfr Exhaust / Evap Standards Comments	--		

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Evaporative/Refueling Family Information			
Evaporative Summary Information Type	New	Submission/Correction Date	09/04/2014
Integrated ORVR?	Yes	Fuel(s)	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Plastic	Fuel Tank Material Description	plastic
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	Yes	Air Intake System Vapor Storage Device Description	Carbon HC trap in air induction system
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	1.9L 3-port Rec. + 0. 1L Bleed
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	110	Number of Primary Canisters	1
Number of Bleed Canisters	1	Bleed Canister Total Working Capacity (grams)	2
Mfr Evaporative/Refueling Family Comments	Tier 3 testing		
Leak Family Details			
Leak Family Indicator	Yes		
Canister Bleed Test Indicator	Yes	Applicability of Evaporative Canister Bleed Test	50 State
Evaporative Canister Bleed Test Comments	--		
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--
CARB Fuel Only (Rig) Test Comments	--		
Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description
GEPAR0250ABC-ABC	50 State	0.02	--

Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Environmental Protection Agency	1 - Green	28 - 1000	Federal	2-Wheel Drive, Front	Semi-Automatic	6	No
Environmental Protection Agency	1 - Green	28 - 1000	California + CAA Section 177 states	2-Wheel Drive, Front	Other	6	Yes
Environmental Protection Agency	1 - Green	28 - 1000	Federal	2-Wheel Drive, Front	Other	6	Yes
Environmental Protection Agency	1 - Green	28 - 1000	Federal	2-Wheel Drive, Front	Automated Manual	6	No
Environmental Protection Agency	1 - Green	28 - 1000	California + CAA Section 177 states	2-Wheel Drive, Front	Automated Manual	6	Yes
Environmental Protection Agency	1 - Green	28 - 1000	California + CAA Section 177 states	2-Wheel Drive, Front	Manual	5	No
Environmental Protection Agency	1 - Green	28 - 1000	Federal	2-Wheel Drive, Front	Automatic	6	No
Environmental Protection Agency	1 - Green	28 - 1000	Federal	2-Wheel Drive, Front	Manual	5	No

Test Group	GEPAV02.0FFV			Evaporative/Refueling Family	GEPAR0250ABC						
Engine Description											
Hybrid Type	--			Hybrid Description	--						
Engine Type	4-Stroke Spark Ignition			Mfr Engine Description	--						
Engine Block Arrangement	Inline			Mfr Engine Block Arrangement Description	--						
Camless Valvetrain Indicator	No			Oil Viscosity/Classification	10W-40/SJ						
Number of Cylinders/Rotors	4										
After Treatment Device(s) (ATD)											
ATD Number		ATD Type		ATD Precious Metal		Substrate Material		Substrate Construction			
1		Three-way catalyst		Platinum + Palladium + Rhodium		Ceramic		Monolith			
Mfr After Treatment Device (ATD) Comments											
--											
Direct Ozone Reduction (DOR) Device											
Not Equipped											
Mfr Emission Control Device Comments											
--											
Engine Configuration Number 1											
Engine Displacement (liters)	2.0			Engine Rated Horsepower	160						
Number of Inlet Valves Per Cylinder	2			Number of Exhaust Valves Per Cylinder	2						
Air Aspiration Method	Naturally Aspirated			Number of Air Aspiration Devices	N/A						
Air Aspiration Device Configuration	--			Charge Air Cooler Type	N/A						
Cylinder Deactivation Description	N/A										
Variable Valve Timing System Description	VVT			Variable Valve Lift System	N/A						
Number of Knock Sensors	2										
Air/Fuel Sensor # 1 Type	Heated oxygen			Air/Fuel Sensor # 1 Description	N/A						
Air/Fuel Sensor # 2 Type	Heated oxygen			Air/Fuel Sensor # 2 Description	N/A						
Mfr Air/Fuel Sensor Comments	--										
Exhaust Gas Recirculation	No			EGR Type	--						
Cooled Exhaust Gas Recirculation	No										
Closed Loop Air Injection System	No			Air Injection Type	--						
Mfr Engine Configuration Comments	2012MY 2.0L MODEL										
Official Test Numbers											
Test Group							EPA City	EPA City	EPA	EPA	CREE
Fuel	FTP	US06	SC03	Cold CO	Highway	Litmus Value	Litmus Threshold	Highway Litmus Value	Highway Litmus Threshold	Weighting Factor	
Ethanol	GEPA10001246	GEPA10001248	GEPA10001249	--	GEPA10001247	N/A	N/A	--	N/A	0.5	
Gasoline	GEPA10001209	GEPA10001211	GEPA10001214	GEPA10001215	GEPA10001210	18.8	284.3	27.4	628.9	0.5	

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
SFTP LEV-III Official Test Numbers			
Test Group Fuel	FTP	US06	SC03
Ethanol	GEPA10001246	GEPA10001248	GEPA10001249
Gasoline	GEPA10001209	GEPA10001211	GEPA10001214

- EXAMPLE -

Test Group	GEPAV02.0FFV		Evaporative/Refueling Family	GEPAR0250ABC							
Emission Data Vehicle Information											
Vehicle ID / Configuration	241AZN4042 / 3										
Vehicle Model											
Represented Test Vehicle Make	Green		Represented Test Vehicle Model	2000							
Leak Family Details											
Leak Family Identifier	--		Leak Family Name	--							
Drive Sources and Fuel System Details											
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>						Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel									
1	Combustion Engine	Gasoline									
Hybrid Indicator	N		Multiple Fuel Combustion	--							
Multiple Fuel Storage	--		Rechargeable Energy Storage System Indicator	--							
Fuel Cell Indicator	N		Rechargeable Energy Storage System, if 'Other'	--							
Rechargeable Energy Storage System	--		# of Transmission Gears	6							
Off-board charge Capable Indicator	--		Axle Ratio	2.89							
Transmission Type	Semi-Automatic		Rated Horsepower	170							
Engine Code	8		Air Aspiration Method	Naturally Aspirated							
Displacement (liters)	2		SIL Usage	Not equipped							
Equivalent Test Weight (pounds)	3875										
Drive Mode While Testing	2-Wheel Drive, Front										
Aged Emission Components	4,000 (mi)										
Dynamometer Coefficients:											
Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients					
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)		C (lbf/mph**2)				
City/Highway/Evap	34.75	0.3538	0.01958	8.41	0.268	0.018	13.5				
Cold CO	38.23	0.3892	0.02154	7.63	0.053	0.023	N/A				
US06	34.75	0.3538	0.01958	8.41	0.268	0.018	N/A				
Manufacturer Test Vehicle Comments	--										

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001209	Test Procedure	31 - Federal Fuel 3-day Exhaust (Butane load)
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2014	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	22.2	--
Bag 1 Fuel Economy	22.2	22.2
Bag 2 Carbon Dioxide	20.7	--
Bag 2 Fuel Economy	20.7	20.7
Bag 3 Carbon Dioxide	26.5	--
Bag 3 Fuel Economy	26.5	26.5
CH4 - Methane	0.0066299	--
Carbon Monoxide	0.0644535	--
Drive Trace Absolute Speed Change Rating	0.7	--
Drive Trace Energy Economy Rating	1.5	--
Drive Trace Inertia Work Ratio Rating	1.05	--
Formaldehyde	0.0003673	--
Manufacturer Fuel Economy	22.3	22.3
Nitrogen Oxide	0.0065005	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.0091824	--
Non-methane organic gas (California)	0.0095497	--
Particulate Matter	0.001	--
Total Hydrocarbon	0.0153155	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	397	999
Optional Carbon-Related Exhaust Emissions	0	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	396.86	--

Manufacturer Test Comments

Tier 3 Testing

Certification Summary Information Report

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family					GEPAR0250ABC		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 20	CO	0.06	--	--	--	1.12	--	1.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	CO-COMP	3.36	--	--	--	--	--	3.4	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	CREE	999	--	--	--	0.001	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG	0.0095	--	--	--	0.0001	--	0.010	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX	0.0160	--	--	--	--	--	0.018	0.020	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX-COMP	0.0487	--	--	--	--	--	0.049	0.100	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NOX	0.0065	--	--	--	0.0022	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	CO	0.06	--	--	--	1.12	--	1.2	4.2	Pass
CA	150,000 miles	California LEV-III SULEV20	CO-COMP	3.36	--	--	--	--	--	3.4	4.2	Pass
CA	150,000 miles	California LEV-III SULEV20	CREE	999	--	--	--	0.001	--	999	--	--
CA	150,000 miles	California LEV-III SULEV20	NMOG	0.0095	--	--	--	0.00015	--	0.010	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX	0.0160	--	--	--	--	--	0.018	0.020	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX-COMP	0.0487	--	--	--	--	--	0.049	0.100	Pass
CA	150,000 miles	California LEV-III SULEV20	NOX	0.0065	--	--	--	0.0022	--	0.009	999.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001215	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	09/01/2014	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	13.4	--
Bag 1 Fuel Economy	13.4	13.4
Bag 2 Carbon Dioxide	15	--
Bag 2 Fuel Economy	15	15
Bag 3 Carbon Dioxide	17.8	--
Bag 3 Fuel Economy	17.8	17.8
CH4 - Methane	0.0262	--
Carbon Monoxide	1.89	--
Drive Trace Absolute Speed Change Rating	0.7	--
Drive Trace Energy Economy Rating	1.5	--
Drive Trace Inertia Work Ratio Rating	1.05	--
Formaldehyde	0.00744	--
Manufacturer Fuel Economy	15.3	15.3
Nitrogen Oxide	0.0303	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.186	--
Non-methane organic gas (California)	0.19344	--
Total Hydrocarbon	0.211	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	573	--

Manufacturer Test Comments --

Certification Summary Information Report

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family					GEPAR0250ABC		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 20	CO	1.89	--	--	--	0.44	--	2.3	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 20	HC-NM	0.19	--	--	--	0.0144	--	0.2	0.2	Pass
CA	50,000 miles	California LEV-III SULEV20	CO	1.89	--	--	--	0.44	--	2.3	10.0	Pass

- EXAMPLE -

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001210	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2014	Fuel	Gasoline
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
CH4 - Methane	0.0015472	--
Carbon Monoxide	0.0111393	--
Drive Trace Absolute Speed Change Rating	0.7	--
Drive Trace Energy Economy Rating	1.5	--
Drive Trace Inertia Work Ratio Rating	1.05	--
Formaldehyde	0.0000852	--
Manufacturer Fuel Economy	28.9	28.9
Nitrogen Oxide	0.0065166	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.002131	--
Non-methane organic gas (California)	0.0022163	--
Total Hydrocarbon	0.0035776	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	308	9999
Optional Carbon-Related Exhaust Emissions	0	9999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	307.55	--

Manufacturer Test Comments

Tier 3 Testing

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family					GEPAR0250ABC		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 20	CREE	9999	--	--	--	0.001	--	9999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG	0.0022	--	--	--	0.0001	--	0.002	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX	0.0087	--	--	--	--	--	0.011	0.020	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NOX	0.0065	--	--	--	0.0022	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	CREE	9999	--	--	--	0.001	--	9999	--	--
CA	150,000 miles	California LEV-III SULEV20	NMOG	0.0022	--	--	--	0.0001	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX	0.0087	--	--	--	--	--	0.011	0.020	Pass
CA	150,000 miles	California LEV-III SULEV20	NOX	0.0065	--	--	--	0.0022	--	0.009	999.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Test #	GEPA10001218	Test Procedure	23 - Federal Fuel 2-day Evap (Butane load)
Exhaust Test # for this Evap Test	GEPA10001209	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2014	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Lab A		
E10 Evaporative Test Measurement Method	Actual FID w/o Speciation (EPA Only)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Total Hydrocarbon equivalent - Evap only	0.24592	--

Manufacturer Test Comments Tier 3 Testing

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.246	0	0.25	0.30	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.246	0	0.25	0.30	Pass

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001211	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2014	Fuel	N/A
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Bag 1 Carbon Dioxide	10.7	--
Bag 1 Fuel Economy	10.7	10.7
Bag 2 Carbon Dioxide	22.8	--
Bag 2 Fuel Economy	22.8	22.8
CH4 - Methane	0.0110907	--
Carbon Monoxide	5.10159	--
Drive Trace Absolute Speed Change Rating	0.7	--
Drive Trace Energy Economy Rating	1.5	--
Drive Trace Inertia Work Ratio Rating	1.05	--
Formaldehyde	0.0013807	--
Manufacturer Fuel Economy	18.1	18.1
Nitrogen Oxide	0.0389462	--
Nitrous Oxide	0.01	--
Non-methane Hydrocarbon	0.0345183	--
Non-methane organic gas (California)	0.035899	--
Particulate Matter	0.004	--
SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	0.07	--
Total Hydrocarbon	0.0449162	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Optional Carbon-Related Exhaust Emissions	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	481.536	--

Manufacturer Test Comments Tier 3 Testing

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001214	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/01/2014	Fuel	N/A
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
CH4 - Methane	0.0129538	--
Carbon Monoxide	2.15479	--
Drive Trace Absolute Speed Change Rating	0.7	--
Drive Trace Energy Economy Rating	1.5	--
Drive Trace Inertia Work Ratio Rating	1.05	--
Formaldehyde	0.0003065	--
Manufacturer Fuel Economy	18.2	18.2
Nitrogen Oxide	0.0456321	--
Non-methane Hydrocarbon	0.0076613	--
Non-methane organic gas (California)	0.0079678	--
Particulate Matter	0.001	--
Total Hydrocarbon	0.0195751	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	484.808	--

Manufacturer Test Comments --

Test Group	GEPAV02.0FFV		Evaporative/Refueling Family	GEPAR0250ABC							
Emission Data Vehicle Information											
Vehicle ID / Configuration	241AZN4042FFV / 0										
Vehicle Model											
Represented Test Vehicle Make	Green	Represented Test Vehicle Model	1000 FFV								
Leak Family Details											
Leak Family Identifier	ABC	Leak Family Name	GEPAR0250ABC-ABC								
Drive Sources and Fuel System Details											
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Ethanol, Gasoline</td> </tr> </tbody> </table>						Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Ethanol, Gasoline
Drive Source and Fuel#	Drive Source	Fuel									
1	Combustion Engine	Ethanol, Gasoline									
Hybrid Indicator	N	Multiple Fuel Combustion	Fuels Combusted Together								
Multiple Fuel Storage	Fuels Stored Together	Rechargeable Energy Storage System Indicator	N								
Fuel Cell Indicator	N	Rechargeable Energy Storage System, if 'Other'	--								
Rechargeable Energy Storage System	--	# of Transmission Gears	6								
Off-board charge Capable Indicator	N	Axle Ratio	2.89								
Transmission Type	Semi-Automatic	Rated Horsepower	170								
Engine Code	8	Air Aspiration Method	Naturally Aspirated								
Displacement (liters)	2	SIL Usage	Not equipped								
Equivalent Test Weight (pounds)	3875										
Drive Mode While Testing	2-Wheel Drive, Front										
Aged Emission Components	4,000 (mi)										
Dynamometer Coefficients:											
Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients					
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)		C (lbf/mph**2)				
City/Highway/Evap	34.75	0.3538	0.01958	8.41	0.268	0.018	13.5				
Cold CO	38.23	0.3892	0.02154	7.63	0.053	0.023	N/A				
US06	34.75	0.3538	0.01958	8.41	0.268	0.018	N/A				
Manufacturer Test Vehicle Comments	TESTING FFV version of previous test vehicle for Tier 3										

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001246	Test Procedure	31 - Federal Fuel 3-day Exhaust (Butane load)
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	38 - E85 (85% Ethanol 15% EPA Unleaded Gasoline)
Test Date	07/24/2014	Fuel	Ethanol
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Acetaldehyde	0.0032054	--
Bag 1 Carbon Dioxide	530	--
Bag 1 Fuel Economy	10.9375519	10.9375519
Bag 2 Carbon Dioxide	528	--
Bag 2 Fuel Economy	11.1144291	11.1144291
Bag 3 Carbon Dioxide	526	--
Bag 3 Fuel Economy	13.2474832	13.2474832
C2H5OH - Ethanol	0.0138478	--
CH3OH - Methanol	0	--
CH4 - Methane	0.0200483	--
Carbon Monoxide	0.3477971	--
Drive Trace Absolute Speed Change Rating	0.99	--
Drive Trace Energy Economy Rating	1.001	--
Drive Trace Inertia Work Ratio Rating	1.02	--
Formaldehyde	0.0008096	--
Manufacturer Fuel Economy	11.5917198	11.5917198
Nitrogen Oxide	0.0071404	--
Nitrous Oxide	0.005	--
Non-methane Hydrocarbon	0.0028333	--
Non-methane organic gas (California)	0.0034237	--
Total Hydrocarbon	0.0416031	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	300	533
Optional Carbon-Related Exhaust Emissions	301	535

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	532.1968878	--

Manufacturer Test Comments

TIER 3 TESTING - E85 for FFV vehicle

Certification Summary Information Report

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family					GEPAR0250ABC		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 20	CREE	533	--	--	--	0.002	--	533	--	--
Fed	150,000 miles	Federal Tier 3 Bin 20	CO	0.35	--	--	--	0.5	--	0.8	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	CO-COMP	1.68	--	--	--	--	--	1.7	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG	0.0034	--	--	--	0.008	--	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX	0.0105	--	--	--	--	--	0.020	0.020	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX-COMP	0.0873	--	--	--	--	--	0.087	0.100	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NOX	0.0071	--	--	--	0.002	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	CO	0.35	--	--	--	0.5	--	0.8	4.2	Pass
CA	150,000 miles	California LEV-III SULEV20	CO-COMP	1.68	--	--	--	--	--	1.7	4.2	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG	0.0034	--	--	--	0.008	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX	0.0105	--	--	--	--	--	0.020	0.020	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX-COMP	0.0873	--	--	--	--	--	0.087	0.100	Pass
CA	150,000 miles	California LEV-III SULEV20	NOX	0.0071	--	--	--	0.002	--	0.009	999.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001247	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	38 - E85 (85% Ethanol 15% EPA Unleaded Gasoline)
Test Date	07/24/2014	Fuel	Ethanol
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Acetaldehyde	0.0032054	--
C2H5OH - Ethanol	0.0138478	--
CH3OH - Methanol	0	--
CH4 - Methane	0.0200483	--
Carbon Monoxide	0.3477971	--
Drive Trace Absolute Speed Change Rating	0.99	--
Drive Trace Energy Economy Rating	-2	--
Drive Trace Inertia Work Ratio Rating	1.02	--
Formaldehyde	0.0008096	--
Manufacturer Fuel Economy	18.5917198	18.5917198
Nitrogen Oxide	0.0014044	--
Nitrous Oxide	0.005	--
Non-methane Hydrocarbon	0.0016374	--
Non-methane organic gas (California)	0.0024237	--
Total Hydrocarbon	0.0416031	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	300	533
Optional Carbon-Related Exhaust Emissions	301	535

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	532.1968878	--

Manufacturer Test Comments

TIER 3 TESTING - E85 for FFV vehicle

Certification Summary Information Report

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family					GEPAR0250ABC		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 20	CREE	533	--	--	--	0.001	--	533	--	--
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG	0.0024	--	--	--	0.0001	--	0.002	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NMOG+NOX	0.0038	--	--	--	--	--	0.006	0.020	Pass
Fed	150,000 miles	Federal Tier 3 Bin 20	NOX	0.0014	--	--	--	0.0022	--	0.004	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	CREE	533	--	--	--	0.001	--	533	--	--
CA	150,000 miles	California LEV-III SULEV20	NMOG	0.0024	--	--	--	0.0001	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-III SULEV20	NMOG+NOX	0.0038	--	--	--	--	--	0.006	0.020	Pass
CA	150,000 miles	California LEV-III SULEV20	NOX	0.0014	--	--	--	0.0022	--	0.004	999.999	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001248	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	38 - E85 (85% Ethanol 15% EPA Unleaded Gasoline)
Test Date	07/25/2014	Fuel	N/A
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Acetaldehyde	0.0032054	--
Bag 1 Carbon Dioxide	530.975789	--
Bag 1 Fuel Economy	20.765	20.765
Bag 2 Carbon Dioxide	528.246809	--
Bag 2 Fuel Economy	25.962	25.962
C2H5OH - Ethanol	0.0138478	--
CH3OH - Methanol	0	--
CH4 - Methane	0.0400483	--
Carbon Monoxide	2.6477971	--
Drive Trace Absolute Speed Change Rating	0.99	--
Drive Trace Energy Economy Rating	1.2	--
Drive Trace Inertia Work Ratio Rating	1.02	--
Formaldehyde	0.0008096	--
Manufacturer Fuel Economy	18.5917198	18.5917198
Nitrogen Oxide	0.0340441	--
Nitrous Oxide	0.005	--
Non-methane Hydrocarbon	0.0263743	--
Non-methane organic gas (California)	0.0642371	--
Total Hydrocarbon	0.0816031	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	532.1968878	--

Manufacturer Test Comments

TIER 3 TESTING - E85 for FFV vehicle

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	GEPA10001249	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	N/A	Test Fuel Type	38 - E85 (85% Ethanol 15% EPA Unleaded Gasoline)
Test Date	07/25/2014	Fuel	N/A
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	LOD		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Acetaldehyde	0.0032054	--
C2H5OH - Ethanol	0.0138478	--
CH3OH - Methanol	0	--
CH4 - Methane	0.0200483	--
Carbon Monoxide	0.8477971	--
Drive Trace Absolute Speed Change Rating	0.99	--
Drive Trace Energy Economy Rating	1.2	--
Drive Trace Inertia Work Ratio Rating	1.02	--
Formaldehyde	0.0008096	--
Manufacturer Fuel Economy	18.5917198	18.5917198
Nitrogen Oxide	0.040441	--
Nitrous Oxide	0.005	--
Non-methane Hydrocarbon	0.0163743	--
Non-methane organic gas (California)	0.0842371	--
Total Hydrocarbon	0.0416031	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	532.1968878	--

Manufacturer Test Comments

TIER 3 TESTING - E85 for FFV vehicle

Test Group	GEPAV02.0FFV		Evaporative/Refueling Family	GEPAR0250ABC							
Emission Data Vehicle Information											
Vehicle ID / Configuration	CDH3-2.0-J-144 / 0										
Vehicle Model											
Represented Test Vehicle Make	MAKE	Represented Test Vehicle Model	MODEL								
Leak Family Details											
Leak Family Identifier	--	Leak Family Name	--								
Drive Sources and Fuel System Details											
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>		Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline			
Drive Source and Fuel#	Drive Source	Fuel									
1	Combustion Engine	Gasoline									
Hybrid Indicator	N	Multiple Fuel Combustion	--								
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--								
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--								
Rechargeable Energy Storage System	--	# of Transmission Gears	6								
Off-board charge Capable Indicator	--	Axle Ratio	3.9								
Transmission Type	Automatic	Rated Horsepower	160								
Engine Code	CDH1G40505	Air Aspiration Method	Naturally Aspirated								
Displacement (liters)	2	SIL Usage	Not equipped								
Equivalent Test Weight (pounds)	3250										
Drive Mode While Testing	2-Wheel Drive, Front										
Aged Emission Components	4,000 (mi)										
Dynamometer Coefficients:											
	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients				
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)					
City/Highway/Evap	31.88	0.2815	0.01943	8.12	0.2779	0.01839	12.6				
Cold CO	31.88	0.2815	0.01943	8.12	0.2779	0.01839	N/A				
US06	31.88	0.2815	0.01943	8.12	0.2779	0.01839	N/A				
Manufacturer Test Vehicle Comments	2012MY 4K EVAP/Exhaust										

Certification Summary Information Report



Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	CEPA10000724	Test Procedure	34 - Federal Fuel 3-day Evap (Butane load)
Exhaust Test # for this Evap Test	CEPA10000723	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	10/08/2010	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Lab A		
E10 Evaporative Test Measurement Method	Actual FID w/o Speciation (EPA Only)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Total Hydrocarbon equivalent - Evap only	0.1249586	--

Manufacturer Test Comments 3-day enhanced evaporative test

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.125	0	0.12	0.30	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.125	0	0.12	0.30	Pass

Certification Summary Information Report



Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	CEPA10000722	Test Procedure	24 - Federal Fuel Refuel (ORVR) (Butane load)
Exhaust Test # for this Evap Test	CEPA10000721	Test Fuel Type	58 - Tier 3 E10 Regular Gasoline (10 RVP-FFV ORVR Only)
Test Date	11/12/2010	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Lab A		
E10 Evaporative Test Measurement Method	--		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Total Hydrocarbon equivalent - Evap only	0.02359	--

Manufacturer Test Comments ORVR test

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.024	0	0.02	0.20	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.024	0	0.02	0.20	Pass

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Test #	CEPA10000725	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	CEPA10000723	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	10/08/2010	Fuel	Gasoline
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Lab A		
E10 Evaporative Test Measurement Method	Actual FID w/o Speciation (EPA Only)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE MPG Equivalent Value
Total Hydrocarbon equivalent - Evap only	0.008744	--

Manufacturer Test Comments 3-day enhanced evaporative test

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.009	0	0.01	0.05	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.009	0	0.01	0.05	Pass

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family			GEPAR0250ABC		
Consolidated List of Standards										
Exhaust Standards										
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-III SULEV20		
Fuel		Gasoline			Test Procedure			HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.99	
150,000 miles	NMOG	--	--	--	--	--	--	0.0001	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020	
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999	
Cert Region California + CAA Section 177 states Cert/In-Use Code Cert Vehicle Class LDV/Passenger Car Standard Level California LEV-III SULEV20 Fuel Gasoline Test Procedure Federal Fuel 3-day Exhaust (Butane load)										
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	CO	--	--	--	--	--	--	1.12	4.2	
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2	
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.999	
150,000 miles	HCHO	--	--	--	--	--	--	--	0.011	
150,000 miles	NMOG	--	--	--	--	--	--	0.00015	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.020	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.100	
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999	

Certification Summary Information Report

Test Group		GEPAV02.0FFV			Evaporative/Refueling Family			GEPAR0250ABC		
Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 20		
Fuel		Gasoline			Test Procedure			Federal Fuel 3-day Exhaust (Butane load)		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	CO	--	--	--	--	--	--	1.12	4.2	
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2	
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.999	
150,000 miles	HC-NM	--	--	--	--	--	--	--	0.050	
150,000 miles	HCHO	--	--	--	--	--	--	--	0.011	
150,000 miles	NMOG	--	--	--	--	--	--	0.0001	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.100	
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999	

Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 20		
Fuel		Ethanol			Test Procedure			Federal Fuel 3-day Exhaust (Butane load)		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
120,000 miles	CREE	--	--	--	--	--	--	0.002	999.999	
150,000 miles	CO	--	--	--	--	--	--	0.5	4.2	
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2	
150,000 miles	NMOG	--	--	--	--	--	--	0.008	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020	
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.100	
150,000 miles	NOX	--	--	--	--	--	--	0.002	999.999	

Certification Summary Information Report

Test Group	GEPAV02.0FFV				Evaporative/Refueling Family			GEPAR0250ABC	
Cert Region	Federal				Cert/In-Use Code			Cert	
Vehicle Class	LDV/Passenger Car				Standard Level			Federal Tier 3 Bin 20	
Fuel	Ethanol				Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.999
150,000 miles	NMOG	--	--	--	--	--	--	0.0001	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999

Cert Region	California + CAA Section 177 states				Cert/In-Use Code			Cert	
Vehicle Class	LDV/Passenger Car				Standard Level			California LEV-III SULEV20	
Fuel	Ethanol				Test Procedure			Federal Fuel 3-day Exhaust (Butane load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.5	4.2
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	--	--	--	--	0.008	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.100
150,000 miles	NOX	--	--	--	--	--	--	0.002	999.999

Cert Region	Federal				Cert/In-Use Code			Cert	
Vehicle Class	LDV/Passenger Car				Standard Level			Federal Tier 3 Bin 20	
Fuel	Gasoline				Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.99
150,000 miles	NMOG	--	--	--	--	--	--	0.0001	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999

Certification Summary Information Report

Test Group	GEPAV02.0FFV				Evaporative/Refueling Family			GEPAR0250ABC		
Cert Region	Federal				Cert/In-Use Code			Cert		
Vehicle Class	LDV/Passenger Car				Standard Level			Federal Tier 3 Bin 20		
Fuel	Gasoline				Test Procedure			Cold CO		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	CO	--	--	--	--	--	--	0.44	10.0	
120,000 miles	HC-NM	--	--	--	--	--	--	0.0144	0.2	

Cert Region	California + CAA Section 177 states				Cert/In-Use Code			Cert		
Vehicle Class	LDV/Passenger Car				Standard Level			California LEV-III SULEV20		
Fuel	Ethanol				Test Procedure			HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	CREE	--	--	--	--	--	--	0.001	999.999	
150,000 miles	NMOG	--	--	--	--	--	--	0.0001	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.020	
150,000 miles	NOX	--	--	--	--	--	--	0.0022	999.999	

Cert Region	California + CAA Section 177 states				Cert/In-Use Code			Cert		
Vehicle Class	LDV/Passenger Car				Standard Level			California LEV-III SULEV20		
Fuel	Gasoline				Test Procedure			Cold CO		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	CO	--	--	--	--	--	--	0.44	10.0	

Evaporative/Refueling Standards

Evaporative/Refueling Family	GEPAR0250ABC				Cert Region			Federal		
Cert/In-Use Code	Cert				Standard Level			Federal Tier 3 Evap		
Test Procedure	Federal Fuel Running Loss									
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF					
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0					

Certification Summary Information Report

Test Group	GEPAV02.0FFV		Evaporative/Refueling Family	GEPAR0250ABC	
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	California + CAA Section 177 states	
Cert/In-Use Code	Cert		Standard Level	California LEV-III Zero Evap (Option 2)	
Test Procedure	Federal Fuel 2-day Evap (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.30	0
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	Federal	
Cert/In-Use Code	Cert		Standard Level	Federal Tier 3 Evap	
Test Procedure	Federal Fuel Refuel (ORVR) (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	California + CAA Section 177 states	
Cert/In-Use Code	Cert		Standard Level	California LEV-III Zero Evap (Option 2)	
Test Procedure	Federal Fuel Running Loss				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	California + CAA Section 177 states	
Cert/In-Use Code	Cert		Standard Level	California LEV-III Zero Evap (Option 2)	
Test Procedure	Federal Fuel Refuel (ORVR) (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	Federal	
Cert/In-Use Code	Cert		Standard Level	Federal Tier 3 Evap	
Test Procedure	Federal Fuel 3-day Evap (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.30	0

Certification Summary Information Report

Test Group	GEPAV02.0FFV		Evaporative/Refueling Family	GEPAR0250ABC	
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	Federal	
Cert/In-Use Code	Cert		Standard Level	Federal Tier 3 Evap	
Test Procedure	Federal Fuel 2-day Evap (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.30	0
Evaporative/Refueling Family	GEPAR0250ABC		Cert Region	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)	
Cert/In-Use Code	Cert		Standard Level		
Test Procedure	Federal Fuel 3-day Evap (Butane load)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.30	0

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Glossary			
Useful Life			
4	4,000 miles	120	120,000 miles
50	50,000 miles	150	150,000 miles
100	100,000 miles		
Emission Name			
HC-TOTAL	Total Hydrocarbon	METHANOL	CH3OH - Methanol
CO	Carbon Monoxide	N2O	Nitrous Oxide
CO2	Carbon dioxide	SPITBACK	Spitback Hydrocarbon in grams
CREE	Carbon-Related Exhaust Emissions	AMP-HRS	Integrated Amp-hours
OPT-CREE	Optional Carbon-Related Exhaust Emissions	START-SOC	System Start State of Charge Watt-hours
NOX	Nitrogen Oxide	END-SOC	System End State of Charge Watt-hours
PM	Particulate Matter	ACT-DISTANCE	Actual Distance Driven (miles)
PM-COMP	SFTP Composite Particulate Matter	AS-VOLT	Average System Voltage
HC-NM	Non-methane Hydrocarbon	CO2 BAG 1	Bag 1 Carbon Dioxide
OMHCE	Organic material Hydrocarbon Equivalent	CO2 BAG 2	Bag 2 Carbon Dioxide
OMNMHCE	Organic material non-methane HC equivalent	CO2 BAG 3	Bag 3 Carbon Dioxide
NMOG	Non-methane organic gas (California)	CO2 BAG 4	Bag 4 Carbon Dioxide
HCHO	Formaldehyde	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
H3C2HO	Acetaldehyde	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	DT-ASCR	Drive Trace Absolute Speed Change Rating
CO-COMP	SFTP Composite Carbon Monoxide	DT-EER	Drive Trace Energy Economy Rating
ETHANOL	C2H5OH - Ethanol	COMB-CREE	Combined Carbon-Related Exhaust Emissions
FE BAG 1	Bag 1 Fuel Economy	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
FE BAG 2	Bag 2 Fuel Economy	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
FE BAG 3	Bag 3 Fuel Economy	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
FE BAG 4	Bag 4 Fuel Economy	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
MFR FE	Manufacturer Fuel Economy	LEAK-DIA	Effective Leak Diameter (inches)
HC	Hydrocarbon for Running Loss and ORVR	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
METHANE	CH4 - Methane		
Certification Region			
CA	California + CAA Section 177 states	FA	Federal
Exhaust Emission Standard Level			
B1	Federal Tier 2 Bin 1	L3ULEV340	California LEV-III ULEV340
B2	Federal Tier 2 Bin 2	L3ULEV250	California LEV-III ULEV250
B3	Federal Tier 2 Bin 3	L3ULEV200	California LEV-III ULEV200
B4	Federal Tier 2 Bin 4	L3SULEV170	California LEV-III SULEV170
B5	Federal Tier 2 Bin 5	L3SULEV150	California LEV-III SULEV150

Certification Summary Information Report

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
B6	Federal Tier 2 Bin 6	L3LEV630	California LEV-III LEV630
B7	Federal Tier 2 Bin 7	L3ULEV570	California LEV-III ULEV570
B8	Federal Tier 2 Bin 8	L3ULEV400	California LEV-III ULEV400
B9	Federal Tier 2 Bin 9	L3ULEV270	California LEV-III ULEV270
B10	Federal Tier 2 Bin 10	L3SULEV230	California LEV-III SULEV230
B11	Federal Tier 2 Bin 11	L3SULEV200	California LEV-III SULEV200
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	T3B160	Federal Tier 3 Bin 160
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	T3B125	Federal Tier 3 Bin 125
L2	California LEV-II LEV	T3B110	Federal Tier 3 Transitional Bin 110
L2OP	California LEV-II LEV Optional	T3B85	Federal Tier 3 Transitional Bin 85
U2	California LEV-II ULEV	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
S2	California LEV-II SULEV	T3B70	Federal Tier 3 Bin 70
ZEV	California ZEV	T3B50	Federal Tier 3 Bin 50
OT	Other	T3B30	Federal Tier 3 Bin 30
T1	Federal Tier 1	T3B20	Federal Tier 3 Bin 20
PZEV	California PZEV	T3B0	Federal Tier 3 Bin 0
L2LEV160	California LEV-II LEV160	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
L2ULEV125	California LEV-II ULEV125	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
L2SULEV30	California LEV-II SULEV30	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2LEV395	California LEV-II LEV395	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2ULEV340	California LEV-II ULEV340	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
L2LEV630	California LEV-II LEV630	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
L2ULEV570	California LEV-II ULEV570	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
L3LEV160	California LEV-III LEV160	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
L3ULEV125	California LEV-III ULEV125	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
L3ULEV70	California LEV-III ULEV70	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
L3ULEV50	California LEV-III ULEV50	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L3SULEV30	California LEV-III SULEV30	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L3SULEV20	California LEV-III SULEV20	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L3LEV395	California LEV-III LEV395	HDV3B0	Federal Tier 3 HD Class 3 Bin 0
Transmission Type Code			
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)
Drive System Code			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		

Test Group	GEPAV02.0FFV	Evaporative/Refueling Family	GEPAR0250ABC
Additional Terms and Acronyms			
AFC	Alternative Fuel Converter	ICI	Independent Commercial Importer
CSI	Certificate Summary Information	ORVR	Onboard Refueling Vapor Recovery
DF	Deterioration Factor	SIL	Shift Indicator Light
Evap	Evaporation, Evaporative	Trans	Transmission

- EXAMPLE -