

Certification Summary Information Report

Manufacturer	General Motors LLC	Manufacturer Code	GMX
Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Certificate Number	VGMXV06.7092-011	CARB Executive Order #	--
Certificate Issue Date	06/22/2026	Certificate Revision Date	--
Certificate Effective Date	06/22/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	05/22/2026 10:16:31 AM
Model Year	2027		

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
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Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	--
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	Spark Ignition direct & ported injection	No

Drive Source #2: Electric Motor

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Electricity	--	--

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes
Multiple Fuel Combustion	--	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	VGMXHHGNNB55	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	08/10/2026	CAP2000 Conditional Certificate?	No
Independent Commercial Importer?	No	Alternative Fuel Converter Certificate?	No
SFTP Federal Composite Compliance Identifier	Tier 3	SFTP Tier 2 Composite CO Option	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VGMXV06.7092
Test Group OBD Compliance Level	Full - no deficiencies	Number of Test Group OBD Deficiencies	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	LS6/ Corvette HP1		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
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Evaporative/Refueling Family Information			
Evaporative Summary Information Type	New	Submission/Correction Date	03/05/2026 02:13:36 PM
Integrated ORVR?	Yes	Fuel(s)	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Plastic	Fuel Tank Material Description	Multi-layer with HDPE and EVOH
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	Yes	Air Intake System Vapor Storage Device Description	HCA
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	121	Number of Primary Canisters	1
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	--
Mfr Evaporative/Refueling Family Comments	--		
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
VGMXR012150A-LK1	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
General Motors LLC	3 - Chevrolet	11 - CORVETTE GRAND SPORT X	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
General Motors LLC	3 - Chevrolet	11 - CORVETTE GRAND SPORT X	Federal	All Wheel Drive	Semi-Automatic	8	Yes

Engine Description			
Hybrid Type	IC Engine/Electric Motor	Hybrid Description	--
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	5W50
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N

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Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
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)	6.7	Engine Rated Horsepower	721
Number of Inlet Valves Per Cylinder	1	Number of Exhaust Valves Per Cylinder	1
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	0
Air Aspiration Device Configuration	--	Charge Air Cooler Type	--
Air Aspiration Drive Method(s)	--		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Dynamic Fuel Management		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Dual equal cam phaser, single cam, continuously variable.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	--		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Zerv Y2 Engine		

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Test Group		VGMXV06.7092				Evaporative/Refueling Family		VGMXR012150A			
Official Test Numbers											
Test Group	Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Electricity		VGMX10094002	VGMX10094004	VGMX10094005	VGMX10094006	VGMX10094003	--	--	--	--	--
Gasoline		VGMX10094002	VGMX10094004	VGMX10094005	VGMX10094006	VGMX10094003	--	15	--	21.1	--
Hybrid Electric Vehicle And Fuel Cell Information											
Rechargeable Energy Storage System		Battery(s)				Rechargeable Energy Storage System, if Other		--			
Battery Type		Lithium Ion				Number of Battery Packs		1			
Total Voltage of Battery Packs		335				Battery Energy Capacity		6.6			
Battery Specific Energy		40.7				Battery Charger Type		On-Board			
Number of Capacitors		--				Capacitor Rating (In Farads)		--			
Mfr Capacitor Comments		--									
Hydraulic System Description		--									
Regenerative Braking Type		Electrical Regen Brake									
Regenerative Braking Source		Front Wheels				Driver Controlled Regenerative Braking		Yes			
Mfr Regenerative Braking Description		--									
Drive Motor(s)/Generator(s)		1									
Motor/Generator Type 1		AC PERMANENT MAGNET				Rated Motor/Generator Power		119			
Mfr Fuel Cell Description		--									
Fuel Cell On-Board H2 Storage Capacity (kg)		--				Usable H2 Fill Capacity (kg)		--			
Mfr Hybrid Electric/ Electric Vehicle Comments		--									

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Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
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Emission Data Vehicle Information

Vehicle ID / Configuration	621RYV2213 / 0	Manufacturer Vehicle Configuration Number	2
Original Test Group Name	TGMXV06.2093	Original Evaporative/Refueling Family	TGMXR012150A
Original Test Vehicle Model Year	2026		

Vehicle Model

Represented Test Vehicle Make	CHEVROLET	Represented Test Vehicle Model	CORVETTE E-RAY
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Leak Family Details

Leak Family Identifier	LK1	Leak Family Name	TGMXR012150A-LK1
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline
2	Electric Motor	Electricity

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
Odometer Correction -- Initial	0	Odometer Correction Factor	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	1	Rated Horsepower	655
Displacement (liters)	6.2		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	4092	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	--	N/V Ratio	21.3
Axle Ratio	5.17		
Transmission Type	Semi-Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creeper Gear	No

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	46.43	0.5967	0.02059	0	0	0	17

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A						
Emission Control Device Comments	LT2 / MLH / HP1								
Manufacturer Test Vehicle Comments	--								
Test #	RGMX10081163	Test Procedure	23 - 2-day evap						
Exhaust Test # for this Evap Test	RGMX10081161	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	03/16/2023	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Compliance and Certification								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4011	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	No								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.3449</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.3449	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.3449	--							
Manufacturer Test Comments	150K EVF2 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	0.3449	0	0.345	0.5	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.3449	0	0.345	0.5	Pass	

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A						
Test #	RGMX10081166	Test Procedure	34 - Federal fuel 3-day evap						
Exhaust Test # for this Evap Test	RGMX10081161	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	06/09/2023	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Compliance and Certification								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4265	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	No								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.4254</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.4254	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.4254	--							
Manufacturer Test Comments									
150K EVF3 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	0.4254	0	0.425	0.5	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.4254	0	0.425	0.5	Pass	

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Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A						
Test #	RGMX10081164	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	RGMX10081161	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	03/23/2023	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Compliance and Certification								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4047	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	No								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.04</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.04	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.04	--							
Manufacturer Test Comments									
150K 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	0.04	0	0.04	0.2	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.04	0	0.04	0.2	Pass	

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A						
Test #	RGMX10081165	Test Procedure	32 - Federal Fuel Running Loss						
Exhaust Test # for this Evap Test	RGMX10081161	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	06/09/2023	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Compliance and Certification								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4265	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	No								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.00045</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00045	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00045	--							
Manufacturer Test Comments									
150K EVFR TEST									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0	0	0	0.05	Pass	

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A						
Test #	RGMX10081167	Test Procedure	65 - Evap Canister Bleed Test						
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	03/16/2023	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Compliance and Certification								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4011	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	No								
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.00384</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL (Total Hydrocarbon)	0.00384	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL (Total Hydrocarbon)	0.00384	--							
Manufacturer Test Comments 150K CBLD TEST									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0038	0	0.004	0.02	Pass	

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
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Emission Data Vehicle Information

Vehicle ID / Configuration	671VYV3620 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	VGMXV06.7092	Original Evaporative/Refueling Family	VGMXR012150A
Original Test Vehicle Model Year	2027		

Vehicle Model

Represented Test Vehicle Make	CHEVROLET	Represented Test Vehicle Model	CORVETTE GRAND SPORT X
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Leak Family Details

Leak Family Identifier	LK1	Leak Family Name	VGMXR012150A-LK1
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Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline
2	Electric Motor	Electricity

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
Odometer Correction -- Initial	0	Odometer Correction Factor	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	1	Rated Horsepower	721
Displacement (liters)	6.7		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	--	Drive Mode While Testing	All Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	4092	Equivalent Test Weight (pounds)	4500
GVWR (lbs)	--	N/V Ratio	22.9
Axle Ratio	5.56		
Transmission Type	Semi-Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creep Gear	No

Certification Summary Information Report

Test Group		VGMXV06.7092			Evaporative/Refueling Family		VGMXR012150A	
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	46.14	0.6005	0.01994	6.8	0.0196	0.02217	16.8	
Cold CO	50.75	0.6606	0.02193	-3.44	-0.1424	0.02563	N/A	
US06	46.14	0.6005	0.01994	6.8	0.0196	0.02217	N/A	
Emission Control Device Comments		LS6 / MLG/ HP1						
Manufacturer Test Vehicle Comments		150K CONFIGURATION EDV: THE E10 5CYCLE PLUS 50°F FTP WERE RUN IN TOUR MODE WITH STOP/START ON TO REPRESENT THE WORST CASE FOR EMISSIONS, AND THE E0 2CYCLE DATA WERE RUN IN TOUR MODE WITH STOP/START OFF TO REPRESENT THE WORST CASE FOR FUEL ECONOMY.						

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Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094002	Test Procedure	31 - Federal fuel 3-day exhaust
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/09/2026	Fuel	Gasoline
Fuel Batch ID	003030	Fuel Calibration Number	9448
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4284	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	7.438875	--
METHANE (CH4 - Methane)	0.005413	--
CO (Carbon Monoxide)	0.211202	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.01727	--
DT-EER (Drive Trace Energy Economy Rating)	0.160658	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.62331	--
MFR FE (Manufacturer Fuel Economy)	19.331921	19.331921
NOX (Nitrogen Oxide)	0.01225	--
N2O (Nitrous Oxide)	0.001111	--
HC-NM (Non-methane Hydrocarbon)	0.013909	--
NMOG (Non-methane organic gases)	0.015303	--
PM (Particulate Matter)	0.000301	--
HC-TOTAL (Total Hydrocarbon)	0.019051	--
WATT-HRS (Watt Hours)	-4.719966	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	451	450

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	449.984	--

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
Manufacturer Test Comments		150K EMIS TEST - CORRECTED CO2 (G/MI) OVERALL = 450.284911, UDDS1 = 480.828275, UDDS2 = 427.243426. CORRECTED FUEL ECONOMY (MPG) UDDS1 = 18.094598, UDDS2 = 20.383410. NEC WHR UDDS1 = 5.976380, UDDS = -10.696346 (DISCHARGE IS NEGATIVE)										
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 70	CREE	450	1	--	--	0	--	450	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.21	1	--	--	--	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO-COMP	0.19	1	--	--	--	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0153	1	--	--	--	--	0.015	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0275	1	--	--	--	--	0.028	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX-COMP	0.0195	1	--	--	--	--	0.02	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0122	1	--	--	--	--	0.012	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0003	1	--	--	--	--	0	0.003	Pass
CA	150,000 miles	California LEV-III ULEV70	CO	0.21	1	--	--	--	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-III ULEV70	CO-COMP	0.19	1	--	--	--	--	0.2	4.2	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0.0153	1	--	--	--	--	0.015	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0275	1	--	--	--	--	0.028	0.070	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX-COMP	0.0195	1	--	--	--	--	0.02	0.070	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.0122	1	--	--	--	--	0.012	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	PM	0.0003	1	--	--	--	--	0	0.003	Pass

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

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094006	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	04/18/2026	Fuel	Gasoline
Fuel Batch ID	003038	Fuel Calibration Number	9432
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4445	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	7.3905685	--
METHANE (CH4 - Methane)	0.022099	--
CO (Carbon Monoxide)	1.02042	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.15834	--
DT-EER (Drive Trace Energy Economy Rating)	0.901708	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.5565	--
MFR FE (Manufacturer Fuel Economy)	15.5078	15.5078
NOX (Nitrogen Oxide)	0.032341	--
HC-NM (Non-methane Hydrocarbon)	0.079214	--
NMOG (Non-methane organic gases)	0.087208	--
HC-TOTAL (Total Hydrocarbon)	0.100016	--
WATT-HRS (Watt Hours)	-5.81893	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	556.784	--

Manufacturer Test Comments

150K COLD FTP TEST - CORRECT CO2 (G/MI) OVERALL = 559.348959, BAG1 = 644.000955, BAG2 = 578.068586, BAG3 = 460.486700. CORRECTED FUEL ECONOMY (MPG) OVERALL = 15.507823, BAG1 = 13.350023, BAG2 = 15.055811, BAG3 = 18.866712. NEC WHR BAG1 = 9.758277, BAG2 = -43.026612, BAG3 = 27.449405 (DISCHARGE IS NEGATIVE)

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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 70	CO	1.02	1	--	--	--	--	1	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 70	HC-NM	0.08	1	--	--	--	--	0.1	0.3	Pass
CA	50,000 miles	California LEV-III ULEV70	CO	1.02	1	--	--	--	--	1	10.0	Pass

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094008	Test Procedure	31 - Federal fuel 3-day exhaust
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	04/20/2026	Fuel	Gasoline
Fuel Batch ID	000307	Fuel Calibration Number	9440
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4463	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
ACT-DISTANCE (Actual Distance Driven (miles))	14.9533	--	
ACT-DISTANCE BAG 1 (Bag 1 Actual Distance)	3.6033	--	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	525.031	--	
CO BAG 1 (Bag 1 Carbon Monoxide)	0.8338	--	
FE BAG 1 (Bag 1 Fuel Economy)	16.9	16.9	
HC-TOTAL BAG 1 (Bag 1 Total Hydrocarbon)	0.0792	--	
WATT-HRS BAG 1 (Bag 1 Watt Hours)	16.8045811	--	
ACT-DISTANCE BAG 2 (Bag 2 Actual Distance)	3.87425	--	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	531.421	--	
CO BAG 2 (Bag 2 Carbon Monoxide)	0.0251	--	
FE BAG 2 (Bag 2 Fuel Economy)	16.8	16.8	
HC-TOTAL BAG 2 (Bag 2 Total Hydrocarbon)	0	--	
WATT-HRS BAG 2 (Bag 2 Watt Hours)	44.8504339	--	
ACT-DISTANCE BAG 3 (Bag 3 Actual Distance)	3.60271	--	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	409.29	--	
CO BAG 3 (Bag 3 Carbon Monoxide)	0.0327	--	
FE BAG 3 (Bag 3 Fuel Economy)	21.8	21.8	
HC-TOTAL BAG 3 (Bag 3 Total Hydrocarbon)	0.0024	--	
WATT-HRS BAG 3 (Bag 3 Watt Hours)	-12.172483	--	
ACT-DISTANCE BAG 4 (Bag 4 Actual Distance)	3.87301	--	
CO2 BAG 4 (Bag 4 Carbon Dioxide)	536.91	--	
CO BAG 4 (Bag 4 Carbon Monoxide)	0.0243	--	
FE BAG 4 (Bag 4 Fuel Economy)	16.6	16.6	
HC-TOTAL BAG 4 (Bag 4 Total Hydrocarbon)	0	--	
WATT-HRS BAG 4 (Bag 4 Watt Hours)	52.956757	--	
METHANE (CH4 - Methane)	0.004311	--	
CO (Carbon Monoxide)	0.194518	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.452003	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.084699	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.05241	--	
MFR FE (Manufacturer Fuel Economy)	17.719	17.719	
NOX (Nitrogen Oxide)	0.011509	--	
N2O (Nitrous Oxide)	0.000297	--	

Certification Summary Information Report

Test Group	VGMXV06.7092			Evaporative/Refueling Family			VGMXR012150A					
	HC-NM (Non-methane Hydrocarbon)		0.013178		--							
	NMOG (Non-methane organic gases)		0.013577		--							
	HC-TOTAL (Total Hydrocarbon)		0.017059		--							
	WATT-HRS (Watt Hours)		102.439289		--							
Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE								
Carbon-Related Exhaust Emissions		498		503								
Test Result Name		Unrounded Test Result		Verify Calculated CO2								
Carbon dioxide		498.169		--								
Manufacturer Test Comments		150K FTP TEST - CORRECTED CO2 (G/MI) OVERALL = 503.280853, UDDS1 = 535.081292, UDDS2 = 479.291048. FUEL ECONOMY (MPG) OVERALL = 17.719040, UDDS1 = 16.651960, UDDS2 = 18.619128. NEC WHR UDDS1 = -61.655015, UDDS2 = -40.784274 (DISCHARGE IS NEGATIVE).										
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 70	CREE	503	1	--	--	0	--	503	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.19	1	--	--	--	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0136	1	--	--	--	--	0.014	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0251	1	--	--	--	--	0.025	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0115	1	--	--	--	--	0.012	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	CO	0.19	1	--	--	--	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0.0136	1	--	--	--	--	0.014	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0251	1	--	--	--	--	0.025	0.070	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.0115	1	--	--	--	--	0.012	99.999	Pass

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

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094009	Test Procedure	52 - Fed. fuel 50 F exh.
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/11/2026	Fuel	Gasoline
Fuel Batch ID	003030	Fuel Calibration Number	9448
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4352	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.005185	--
CO (Carbon Monoxide)	0.240494	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.47107	--
DT-EER (Drive Trace Energy Economy Rating)	0.580578	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.26332	--
NOX (Nitrogen Oxide)	0.015031	--
HC-NM (Non-methane Hydrocarbon)	0.016236	--
NMOG (Non-methane organic gases)	0.017863	--
HC-TOTAL (Total Hydrocarbon)	0.0212	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	481.396	--

Manufacturer Test Comments --

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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
CA	4,000 miles	California LEV-III ULEV70	CO	0.24	1	--	--	--	--	0.2	1.7	Pass
CA	4,000 miles	California LEV-III ULEV70	NMOG	0.0179	1	--	--	--	--	0.018	99.999	Pass
CA	4,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0329	1	--	--	--	--	0.033	0.140	Pass
CA	4,000 miles	California LEV-III ULEV70	NOX	0.015	1	--	--	--	--	0.015	99.999	Pass

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094003	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/09/2026	Fuel	Gasoline
Fuel Batch ID	003030	Fuel Calibration Number	9448
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4299	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	10.2464	--
METHANE (CH4 - Methane)	0.000858	--
CO (Carbon Monoxide)	0.057511	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.86693	--
DT-EER (Drive Trace Energy Economy Rating)	-0.072356	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.57924	--
MFR FE (Manufacturer Fuel Economy)	31.1587	31.1587
NOX (Nitrogen Oxide)	0.002875	--
N2O (Nitrous Oxide)	0.000557	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0004	--
WATT-HRS (Watt Hours)	39.49452	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	279	282

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	281.762	--

Manufacturer Test Comments

150K HIGHWAY - CORRECTED CO2 (G/MI) = 279.017962, NEC WHR = 39.494520 (DISCHARGE IS NEGATIVE)

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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 70	CREE	282	1	--	--	0	--	282	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0	1	--	--	--	--	0	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0029	1	--	--	--	--	0.003	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0029	1	--	--	--	--	0.003	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0	1	--	--	--	--	0	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0029	1	--	--	--	--	0.003	0.070	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.0029	1	--	--	--	--	0.003	99.999	Pass

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

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094007	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	04/20/2026	Fuel	Gasoline
Fuel Batch ID	000307	Fuel Calibration Number	9440
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4478	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	10.2694	--
METHANE (CH4 - Methane)	0.007766	--
CO (Carbon Monoxide)	0.086902	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.00832	--
DT-EER (Drive Trace Energy Economy Rating)	0.240259	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.8902	--
MFR FE (Manufacturer Fuel Economy)	30.904424	30.904424
NOX (Nitrogen Oxide)	0.004049	--
N2O (Nitrous Oxide)	0.001566	--
HC-NM (Non-methane Hydrocarbon)	0.008991	--
NMOG (Non-methane organic gases)	0.009261	--
HC-TOTAL (Total Hydrocarbon)	0.0164	--
WATT-HRS (Watt Hours)	-9.179563	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	289	289

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	289.474	--

Manufacturer Test Comments

150K HWY TEST - CORRECTED CO2 (G/MI) = 288.837642, CORRECTED FUEL ECONOMY (MPG) = 30.904424, NEC WHR = 9.179563 (DISCHARGE IS NEGATIVE)

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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 70	CREE	289	1	--	--	0	--	289	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0093	1	--	--	--	--	0.009	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0133	1	--	--	--	--	0.013	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.004	1	--	--	--	--	0.004	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0.0093	1	--	--	--	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0133	1	--	--	--	--	0.013	0.070	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.004	1	--	--	--	--	0.004	99.999	Pass

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

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094004	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/09/2026	Fuel	Gasoline
Fuel Batch ID	003030	Fuel Calibration Number	9448
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4321	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	8.00761	--
METHANE (CH4 - Methane)	0.007325	--
CO (Carbon Monoxide)	0.16183	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.82874	--
DT-EER (Drive Trace Energy Economy Rating)	-0.58716	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.59113	--
MFR FE (Manufacturer Fuel Economy)	22.5306	22.5306
NOX (Nitrogen Oxide)	0.010375	--
HC-NM (Non-methane Hydrocarbon)	0.00772	--
NMOG (Non-methane organic gases)	0.007952	--
PM (Particulate Matter)	0.000301	--
HC-TOTAL (Total Hydrocarbon)	0.014677	--
WATT-HRS (Watt Hours)	-12.720659	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	385.116	--

Manufacturer Test Comments

150K US06 TEST - CORRECT CO2 (G/MI), OVERALL = 386.246704, CITY = 523.245119, HWY = 347.240762. FUEL ECONOMY (MPG) OVERALL = 22.530623, CITY = 16.650069, HWY = 25.079202. NEC WHR CITY = -14.368738, HWY = 1.648079 (DISCHARGE IS NEGATIVE)

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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 70	CO	0.16	1	--	--	--	--	0.2	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.008	1	--	--	--	--	0.008	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0184	1	--	--	--	--	0.018	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0104	1	--	--	--	--	0.01	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0003	1	--	--	--	--	0	0.006	Pass
CA	150,000 miles	California LEV-III ULEV70	CO	0.16	1	--	--	--	--	0.2	99.9	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0.008	1	--	--	--	--	0.008	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0184	1	--	--	--	--	0.018	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.0104	1	--	--	--	--	0.01	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	PM	0.0003	1	--	--	--	--	0	0.006	Pass

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Test #	VGMX10094005	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/24/2026	Fuel	Gasoline
Fuel Batch ID	003030	Fuel Calibration Number	9448
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	Compliance and Certification		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4515	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
ACT-DISTANCE (Actual Distance Driven (miles))	3.56853	--
METHANE (CH4 - Methane)	0.010104	--
CO (Carbon Monoxide)	0.194228	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.761939	--
DT-EER (Drive Trace Energy Economy Rating)	0.141127	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.37627	--
MFR FE (Manufacturer Fuel Economy)	15.071646	15.071646
NOX (Nitrogen Oxide)	0.011098	--
HC-NM (Non-methane Hydrocarbon)	0.001549	--
NMOG (Non-methane organic gases)	0.001596	--
HC-TOTAL (Total Hydrocarbon)	0.011118	--
WATT-HRS (Watt Hours)	-68.080232	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	563.942	--

Manufacturer Test Comments 150K SC03 TEST - CORRECTED CO2 (G/MI) = 577.523767, FUEL ECONOMY (MPG) = 15.071646, NEC WHR = -68.080232

Certification Summary Information Report

Test Group		VGMXV06.7092				Evaporative/Refueling Family				VGMXR012150A		
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 70	CO	0.19	1	--	--	--	--	0.2	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0016	1	--	--	--	--	0.002	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0127	1	--	--	--	--	0.013	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0111	1	--	--	--	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	CO	0.19	1	--	--	--	--	0.2	99.9	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG	0.0016	1	--	--	--	--	0.002	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NMOG+NOX	0.0127	1	--	--	--	--	0.013	99.999	Pass
CA	150,000 miles	California LEV-III ULEV70	NOX	0.0111	1	--	--	--	--	0.011	99.999	Pass

Certification Summary Information Report

Test Group	VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
Fuel Properties			
Fuel Batch ID	003030	Fuel Calibration Number	9448
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	03/09/2026
Fuel Batch Calibration Effective Date	03/09/2026	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.747
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17799
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.401	Fuel Carbon Mass Fraction (E10)	0.827
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	000307	Fuel Calibration Number	9440
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	11/20/2025
Fuel Batch Calibration Effective Date	11/20/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18438
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.867	Weight Fraction CO2	--
Fuel Batch ID	003038	Fuel Calibration Number	9432
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	09/09/2025
Fuel Batch Calibration Effective Date	09/09/2025	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.746
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17788
Fuel Net Heat of Combustion (E10) (MJ/kg)	44.444	Fuel Carbon Mass Fraction (E10)	0.999
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VGMXV06.7092			Evaporative/Refueling Family			VGMXR012150A		
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 ULEV70		
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	NMOG	--	1	--	--	--	--	--	99.999	
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.070	
150,000 miles	NOX	--	1	--	--	--	--	--	99.999	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-III ULEV70		
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	--	1	--	--	--	--	--	10.0	
Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 70		
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	--	1	--	--	--	--	--	10.0	
120,000 miles	HC-NM	--	1	--	--	--	--	--	0.3	

Certification Summary Information Report

Test Group		VGMXV06.7092			Evaporative/Refueling Family			VGMXR012150A	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-III ULEV70	
Fuel		Gasoline			Test Procedure			US06	
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	--	--	--	--	--	99.9
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	99.999
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.006
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 70	
Fuel		Gasoline			Test Procedure			Federal fuel 3-day exhaust	
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	--	1	--	--	--	--	0	999.999
150,000 miles	CO	--	1	--	--	--	--	--	1.7
150,000 miles	CO-COMP	--	1	--	--	--	--	--	4.2
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.070
150,000 miles	NMOG+NOX-COMP	--	1	--	--	--	--	--	0.070
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.003
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 70	
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
120,000 miles	CREE	--	1	--	--	--	--	0	999.999
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.070
150,000 miles	NOX	--	1	--	--	--	--	--	99.999

Certification Summary Information Report

Test Group		VGMXV06.7092			Evaporative/Refueling Family			VGMXR012150A	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-III ULEV70	
Fuel		Gasoline			Test Procedure			Fed. fuel 50 F exh.	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
4,000 miles	CO	--	1	--	--	--	--	--	1.7
4,000 miles	NMOG	--	1	--	--	--	--	--	99.999
4,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.140
4,000 miles	NOX	--	1	--	--	--	--	--	99.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-III ULEV70	
Fuel		Gasoline			Test Procedure			Federal fuel 3-day exhaust	
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	--	--	--	--	--	1.7
150,000 miles	CO-COMP	--	1	--	--	--	--	--	4.2
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.070
150,000 miles	NMOG+NOX-COMP	--	1	--	--	--	--	--	0.070
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.003

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 70	
Fuel		Gasoline			Test Procedure			SC03	
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	--	--	--	--	--	99.9
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	99.999
150,000 miles	NOX	--	1	--	--	--	--	--	99.999

Certification Summary Information Report

Test Group	VGMXV06.7092				Evaporative/Refueling Family			VGMXR012150A	
Cert Region	California + CAA Section 177 states				Cert/In-Use Code			Cert	
Vehicle Class	LDV/Passenger Car				Standard Level			California LEV-III ULEV70	
Fuel	Gasoline				Test Procedure			SC03	
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	--	--	--	--	--	99.9
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	99.999
150,000 miles	NOX	--	1	--	--	--	--	--	99.999

Cert Region	Federal				Cert/In-Use Code			Cert	
Vehicle Class	LDV/Passenger Car				Standard Level			Federal Tier 3 Bin 70	
Fuel	Gasoline				Test Procedure			US06	
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	--	--	--	--	--	99.9
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	99.999
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.006

Evaporative/Refueling Standards

Evaporative/Refueling Family		VGMXR012150A		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0		

Evaporative/Refueling Family		VGMXR012150A		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL	--		0.020	0	

Certification Summary Information Report

Test Group		VGMXV06.7092		Evaporative/Refueling Family		VGMXR012150A	
Evaporative/Refueling Family		VGMXR012150A		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		VGMXR012150A		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 refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0		
Evaporative/Refueling Family		VGMXR012150A		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0		
Evaporative/Refueling Family		VGMXR012150A		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0		
Evaporative/Refueling Family		VGMXR012150A		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 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0		

Certification Summary Information Report

Test Group		VGMXV06.7092		Evaporative/Refueling Family		VGMXR012150A					
Evaporative/Refueling Family		VGMXR012150A		Cert Region		Federal					
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap					
Test Procedure		2-day evap									
Fuel		Useful Life		Emission Name		Rounded Result		Std		Add DF	
Gasoline		150,000 miles		HC-TOTAL-EQUIV		--		0.500		0	

Certification Summary Information Report

Test Group		VGMXV06.7092	Evaporative/Refueling Family	VGMXR012150A
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	COMB-CREE	Combined Carbon-Related Exhaust Emissions	
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions	
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only	
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only	
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only	
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)	
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)	
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only	
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS	
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane	
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane	
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane	
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane	
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide	
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide	
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide	
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide	
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases	
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases	
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases	
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases	
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance	
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance	
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance	
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance	
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon	
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon	
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon	
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon	
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours	
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours	

Certification Summary Information Report

Test Group		VGMXV06.7092	Evaporative/Refueling Family		VGMXR012150A
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

Certification Summary Information Report

Test Group		VGMXV06.7092	Evaporative/Refueling Family		VGMXR012150A
L2ULEV340	California LEV-II ULEV340		L4SULEV85	California LEV-IV SULEV85	
L2LEV630	California LEV-II LEV630		L4ULEV125	California LEV-IV ULEV125	
L2ULEV570	California LEV-II ULEV570		L4ULEV200	California LEV-IV ULEV200	
L3LEV160	California LEV-III LEV160		L4ULEV250	California LEV-IV ULEV250	
L3ULEV125	California LEV-III ULEV125		L4ULEV270	California LEV-IV ULEV270	
L3ULEV70	California LEV-III ULEV70		L4ULEV40	California LEV-IV ULEV40	
L3ULEV50	California LEV-III ULEV50		L4ULEV400	California LEV-IV ULEV400	
L3SULEV30	California LEV-III SULEV30		L4ULEV50	California LEV-IV ULEV50	
L3SULEV20	California LEV-III SULEV20		L4ULEV60	California LEV-IV ULEV60	
L3LEV395	California LEV-III LEV395		L4ULEV70	California LEV-IV ULEV70	
L3ULEV340	California LEV-III ULEV340		T4B170	Federal Tier 4 MDV Bin 170	
L3ULEV250	California LEV-III ULEV250		T4B150	Federal Tier 4 MDV Bin 150	
L3ULEV200	California LEV-III ULEV200		T4B125	Federal Tier 4 MDV Bin 125	
L3SULEV170	California LEV-III SULEV170		T4B100	Federal Tier 4 MDV Bin 100	
L3SULEV150	California LEV-III SULEV150		T4B85	Federal Tier 4 MDV Bin 85	
L3LEV630	California LEV-III LEV630		T4B75	Federal Tier 4 MDV Bin 75	
L3ULEV570	California LEV-III ULEV570		T4B70	Federal Tier 4 Bin 70	
L3ULEV400	California LEV-III ULEV400		T4B65	Federal Tier 4 Bin 65	
L3ULEV270	California LEV-III ULEV270		T4B60	Federal Tier 4 Bin 60	
L3SULEV230	California LEV-III SULEV230		T4B55	Federal Tier 4 Bin 55	
L3SULEV200	California LEV-III SULEV200		T4B50	Federal Tier 4 Bin 50	
T3B160	Federal Tier 3 Bin 160		T4B45	Federal Tier 4 Bin 45	
T3B125	Federal Tier 3 Bin 125		T4B40	Federal Tier 4 Bin 40	
T3B110	Federal Tier 3 Transitional Bin 110		T4B35	Federal Tier 4 Bin 35	
T3B85	Federal Tier 3 Transitional Bin 85		T4B30	Federal Tier 4 Bin 30	
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover		T4B25	Federal Tier 4 Bin 25	
T3B70	Federal Tier 3 Bin 70		T4B20	Federal Tier 4 Bin 20	
T3B50	Federal Tier 3 Bin 50		T4B15	Federal Tier 4 Bin 15	
T3B30	Federal Tier 3 Bin 30		T4B10	Federal Tier 4 Bin 10	
T3B20	Federal Tier 3 Bin 20		T4B5	Federal Tier 4 Bin 5	
T3B0	Federal Tier 3 Bin 0		T4B0	Federal Tier 4 Bin 0	
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395				
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		

Certification Summary Information Report

Test Group		VGMXV06.7092	Evaporative/Refueling Family		VGMXR012150A
F	2-Wheel Drive, Front		A	All Wheel Drive	
R	2-Wheel Drive, Rear				
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	