

APPLICATION FOR CERTIFICATION

2027 MODEL YEAR

Durability Group:	VGMXGPGNNB02
Test Group:	VGMXT02.5000
Durability Group Description:	Four Stroke, Otto Cycle, Gasoline Fueled, DFI, Turbocharger, Ceramic Monolith Pd/Rh Catalyst
Durability Vehicle:	Aged Components
OBD Group:	VGMXOBDG03A
Test Group Description:	2.5L L4
Applicable Standards:	Federal LDT3 Bin30/California LDT3 SULEV30
Carlines Covered by Evaporative Family:	2.5L GMC ACADIA AWD GMC ACADIA FWD Buick ENCLAVE AWD Buick ENCLAVE FWD Chevrolet TRAVERSE AWD Chevrolet TRAVERSE FWD VGMXR015740B
Vehicles Tested:	254TLV5604
For Questions, Contact:	Amanda Lotsof

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(Included in Initial Application)

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(Included in Final Application)

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TEST VEHICLE DESCRIPTION

	<u>Durability Vehicle Selection</u>	<u>Emission-Data Vehicle Selection</u>
Test Group	NA Aged Components	VGMXT02.5000
Evaporative Family		VGMXR015740B
Displacement – Liters		2.5
Engine Code		2
Emission Control System		
Exhaust		TC/CAC/DFI/WR-HO2S/TWC/HO2S
Evap		C-CCP-IC
Model		TLF56+F48
Transmission Type/Code		A8 / 2
Shift Schedule		NA
(LVW) Test Weight – Lbs		5250
GVWR		6394 lbs
Roadload HP		17.3
Final Drive		3.49
N/V Ratio – rpm/mph		23.6
Tires		275/45R22
Vehicle/EPA Config No./GM Config No.		
FTP & HWFE		254TLV5604/01/002
SFTP		254TLV5604/01/002
20° CO		254TLV5604/01/002

NOTE: For complete vehicle information, see vehicle information submitted in EV-CIS database.

Data Vehicle Selection Justification - This vehicle is expected to be worst-case for exhaust emission compliance on candidate in-use vehicles, considering all exhaust emission constituents, all exhaust test procedures, and the potential impact of air conditioning on test results.

2027 EMISSION STANDARDS

BIN30 (LDT3)

TEST GROUP NAME: VGMXT02.5000

EVAPORATIVE FAMILY NAME(S): VGMXR015740B

CERTIFICATION & IN-USE STANDARDS

LOW AND HIGH ALTITUDE:

	FTP TEST						
	Low Altitude NMOG+NOx	High Altitude NMOG+NOx	CO	HCHO	PM	CH4	N2O
120K STD	NA	NA	NA	NA	NA	0.030	0.010
150k STD	0.030	0.050	1.0	0.004	0.003	NA	NA

	HWY TEST		20 °F TEST	
	Low Altitude NMOG+NOx	High Altitude NMOG+NOx	CO	NMHC
50K STD	NA	NA	12.5	NA
120K STD	NA	NA	NA	0.5
150k STD	0.030	0.050	NA	NA

SFTP - LOW ALTITUDE:

	US06 PM	COMPOSITE ^{*1}	COMPOSITE ^{*1}
		NMOG+NOx	CO
150K STD	0.006	0.050	4.2

*1 The calculation used for the composite results for NMOG+NOx, CO and PM = 35%FTP + 28%US06 + 37%SC03

86.1844(d)(7)-VGMXT02.5000

2027 EMISSION STANDARDS

LEV3 SULEV30 (LDT3)

TEST GROUP NAME: VGMXT02.5000

EVAPORATIVE FAMILY NAME(S):VGMXR015740B

CERTIFICATION & IN-USE STANDARDS

	FTP TEST				HWY TEST	20 °F TEST
	NMOG+NOx	CO	HCHO	PM	NMOG+NOx	CO
50K STD	NA	NA	NA	NA	NA	12.5
150K STD (Low)	0.030	1.0	0.004	0.001	0.030	NA
150K STD (High)	0.050	1.0	0.004	0.001	0.050	

SFTP - LOW ALTITUDE:

	US06 PM	COMPOSITE* ¹ NMOG+NOx	COMPOSITE* ¹ CO
150K STD	0.003	0.050	4.2

50 °F TEST:

	NMOG+NOx	CO	HCHO
4K STD	0.060	1.0	0.008

Note: Standards apply at Low and High Altitudes unless otherwise noted.

86.1844(d)(7)-VGMXT02.5000

Litmus Test

Test Group	Test Vehicle #	Config #	Vehicle Run #(s)	City				Highway				Minimum Required Calculation	Status
				5-Cycle Derived	5-Cycle Calc	Threshold	Result	5-Cycle Derived	5-Cycle Calc	Threshold	Result		
VGMXT02.5000	254TLV5604	002	4,5,EPA1,EPA2,EPA3	18.5595	17.8	17.8	Pass	22.9789	21.8	21.8	Pass	5 Cycle Lookup / 2 Cycle Derived (EMIS, HWFE)	OFFICIAL

Close

Certification Summary Information Report

Manufacturer	General Motors LLC	Manufacturer Code	GMX
Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	04/30/2026 02:35:21 PM
Model Year	2027		

Test Group Information

CSI Type	New	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 fuel injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	--
Fuel Cell Indicator	--	EPA Vehicle Class	LDT3
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	VGMXGPGNNB02	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	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VGMXT02.5000
Test Group OBD Compliance Level	Full - no deficiencies	Number of Test Group OBD Deficiencies	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	MY27 C1YX-2 LK0 2.5L BIN30/SULEV30		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Evaporative/Refueling Family Information			
Evaporative Summary Information Type	New	Submission/Correction Date	04/29/2026 02:09:34 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)	158	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
VGMXR015740B-LK1	50 State	0.02	--

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
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Models Covered by this Certificate

Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
General Motors LLC	4 - GMC	942 - ACADIA AWD	California + CAA Section 177 states	All Wheel Drive	Automatic	8	Yes
General Motors LLC	3 - Chevrolet	30 - TRAVERSE AWD	Federal	All Wheel Drive	Automatic	8	Yes
General Motors LLC	3 - Chevrolet	29 - TRAVERSE FWD	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	3 - Chevrolet	30 - TRAVERSE AWD	California + CAA Section 177 states	All Wheel Drive	Automatic	8	Yes
General Motors LLC	4 - GMC	942 - ACADIA AWD	Federal	All Wheel Drive	Automatic	8	Yes
General Motors LLC	1 - Buick	134 - ENCLAVE FWD	Federal	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	1 - Buick	135 - ENCLAVE AWD	California + CAA Section 177 states	All Wheel Drive	Automatic	8	Yes
General Motors LLC	3 - Chevrolet	29 - TRAVERSE FWD	Federal	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	4 - GMC	941 - ACADIA FWD	Federal	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	1 - Buick	134 - ENCLAVE FWD	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	4 - GMC	941 - ACADIA FWD	California + CAA Section 177 states	2-Wheel Drive, Front	Automatic	8	Yes
General Motors LLC	1 - Buick	135 - ENCLAVE AWD	Federal	All Wheel Drive	Automatic	8	Yes

Engine Description		Hybrid 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	0W20
Number of Cylinders/Rotors	4	Mechanically Variable Compression Ratio Indicator	N

After Treatment Device(s) (ATD)

ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith

Mfr After Treatment Device (ATD) Comments	--
Direct Ozone Reduction (DOR) Device	Not Equipped
Mfr Emission Control Device Comments	--

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family			VGMXR015740B													
Engine Configuration Number 1																					
Engine Displacement (liters)		2.5			Engine Rated Horsepower			328													
Number of Inlet Valves Per Cylinder		2			Number of Exhaust Valves Per Cylinder			2													
Air Aspiration Method		Turbocharged			Number of Air Aspiration Devices			1													
Air Aspiration Device Configuration		Single			Charge Air Cooler Type			Liquid													
Air Aspiration Drive Method(s)		Mechanical																			
Cylinder Deactivation		No																			
Cylinder Deactivation Description		--																			
Variable Valve Timing		Yes																			
Variable Valve Timing System Description		Cam Phaser																			
Variable Valve Lift?		No																			
Variable Valve Lift System Description		--																			
Number of Knock Sensors		1			Number of Air/Fuel Sensors			2													
Air/Fuel Sensor # 1 Type		Heated oxygen			Air/Fuel Sensor # 1 Description			--													
Air/Fuel Sensor # 2 Type		Heated oxygen			Air/Fuel Sensor # 2 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		--																			
Official Test Numbers																					
Test Group		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					
Gasoline		TGMX91006317		TGMX91006319		TGMX10089809		TGMX10089810		TGMX91006316		82.6		228.2		999.9		286.1		--	

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B																					
Emission Data Vehicle Information																								
Vehicle ID / Configuration	20TLNN5933 / 0	Manufacturer Vehicle Configuration Number	0																					
Original Test Group Name	LGMXT02.0500	Original Evaporative/Refueling Family	LGMXR015740B																					
Original Test Vehicle Model Year	2020																							
Vehicle Model																								
Represented Test Vehicle Make	GMC	Represented Test Vehicle Model	ACADIA AWD																					
Leak Family Details																								
Leak Family Identifier	LK1	Leak Family Name	LGMXR015740B-LK1																					
Drive Sources and Fuel System Details																								
<table><tr><td>Drive Source and Fuel#</td><td>Drive Source</td><td>Fuel</td></tr><tr><td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr></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	No																							
Multiple Fuel Storage	--	Multiple Fuel Combustion	--																					
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--																					
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--																					
Off-board charge Capable Indicator	--																							
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	6	Rated Horsepower	237																					
Displacement (liters)	2																							
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	TURBOCHARGED																					
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single																					
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Front																					
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)																					
Curb Weight (lbs)	4283	Equivalent Test Weight (pounds)	4500																					
GVWR (lbs)	6001	N/V Ratio	24.7																					
Axle Ratio	3.47																							
Transmission Type	Automatic	# of Transmission Gears	9																					
Transmission Lockup	Yes	Creeper Gear	No																					
Dynamometer Coefficients:																								
<table><tr><td colspan="3">Target Coefficients</td><td colspan="3">Set Coefficients</td><td rowspan="3">EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</td></tr><tr><td>Coefficient Category</td><td>A (lbf)</td><td>B (lbf/mph)</td><td>C (lbf/mph**2)</td><td>A (lbf)</td><td>B (lbf/mph)</td><td>C (lbf/mph**2)</td></tr><tr><td>City/Highway/Evap</td><td>32.84</td><td>0.426</td><td>0.0247</td><td>13.8</td><td>0.1706</td><td>0.02527</td></tr></table>				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	32.84	0.426	0.0247	13.8	0.1706	0.02527
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	32.84	0.426	0.0247	13.8	0.1706		0.02527																	
Emission Control Device Comments	Acadia AWD																							

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B						
Manufacturer Test Vehicle Comments	--								
Test #	LGMX10061440	Test Procedure	34 - Federal fuel 3-day evap						
Exhaust Test # for this Evap Test	LGMX10061437	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	08/27/2019	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	7257	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>0.2915</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)	0.2915	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2915	--							
Manufacturer Test Comments	4K 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	0.2915	0.0000	0.292	0.450	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2915	0.0000	0.292	0.450	Pass	

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Test #	LGMX91004483	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	LGMX91004482	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	10/03/2019	Fuel	Gasoline
Fuel Batch ID	27723	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	Actual FID w/o Speciation (EPA Only)		
Test Start Odometer Reading	7440	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.263612	--

Manufacturer Test Comments

Hot_Soak_HC_(g) = 0.031990, Diurnal (gHC) = 0.231622

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	0.2636	0.0000	0.264	0.450	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2636	0.0000	0.264	0.450	Pass

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B						
Test #	LGMX10061439	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	LGMX10061437	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	08/17/2019	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	7202	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>0.024</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)	0.024	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.024	--							
Manufacturer Test Comments									
4K 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	0.000	0.02	0.20	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.024	0.000	0.02	0.20	Pass	

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B						
Test #	LGMX10061441	Test Procedure	32 - Federal Fuel Running Loss						
Exhaust Test # for this Evap Test	LGMX10061437	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	09/06/2019	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	7262	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>0.00054</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)	0.00054	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00054	--							
Manufacturer Test Comments									
4K EVFR 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	0.001	0.000	0.00	0.05	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.001	0.000	0.00	0.05	Pass	

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B						
Test #	LGMX10061442	Test Procedure	65 - Evap Canister Bleed Test						
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	07/25/2019	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	7000	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 (Total Hydrocarbon)</td> <td>0.01214</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL (Total Hydrocarbon)	0.01214	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL (Total Hydrocarbon)	0.01214	--							
Manufacturer Test Comments									
4K CBLD 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	0.0121	0.0000	0.012	0.020	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0121	0.0000	0.012	0.020	Pass	

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B						
Emission Data Vehicle Information									
Vehicle ID / Configuration	254TLV5604 / 1	Manufacturer Vehicle Configuration Number	1						
Original Test Group Name	TGMXT02.5000	Original Evaporative/Refueling Family	TGMXR015740B						
Original Test Vehicle Model Year	2026								
Vehicle Model									
Represented Test Vehicle Make	GMC	Represented Test Vehicle Model	ACADIA AWD						
Leak Family Details									
Leak Family Identifier	LK1	Leak Family Name	TGMXR015740B-LK1						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </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	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
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	2	Rated Horsepower	328						
Displacement (liters)	2.5								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single						
Charge Air Cooler Type	Liquid	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)						
Curb Weight (lbs)	4873	Equivalent Test Weight (pounds)	5250						
GVWR (lbs)	6394	N/V Ratio	23.6						
Axle Ratio	3.49								
Transmission Type	Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family		VGMXR015740B	
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	36.79	0.4757	0.02759	-3.54	0.2124	0.02742	17.3	
Cold CO	40.47	0.5233	0.03035	-13.28	-0.0031	0.03101	N/A	
US06	36.79	0.4757	0.02759	-3.54	0.2124	0.02742	N/A	
Emission Control Device Comments		C1YC-2/C1YG-2/C1YB-2 AWD LK0						
Manufacturer Test Vehicle Comments		MY26 C1YX-2 LK0 EDV 150K						

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B																																																			
Test #	TGMX10089810	Test Procedure	11 - Cold CO																																																			
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)																																																			
Test Date	02/14/2025	Fuel	Gasoline																																																			
Fuel Batch ID	000334	Fuel Calibration Number	9312																																																			
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																																			
Verify Test Lab ID	Compliance and Certification																																																					
E10 Evaporative Test Measurement Method	--																																																					
Test Start Odometer Reading	4479	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																																																						
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Carbon dioxide	466.047	--																																																				
Manufacturer Test Comments	150K COLD TEST																																																					

Certification Summary Information Report

Test Group		VGMXT02.5000				Evaporative/Refueling Family				VGMXR015740B		
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 30	CO	1.92	1	--	--	--	--	1.9	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	HC-NM	0.17	1	--	--	--	--	0.2	0.5	Pass
CA	50,000 miles	California LEV-III SULEV30	CO	1.92	1	--	--	--	--	1.9	12.5	Pass

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Test #	TGMX91006317	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	03/28/2025	Fuel	Gasoline
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4760	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	403.4829407	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	371.2164001	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	348.9560242	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0259017	--
CO (Carbon Monoxide)	0.5729817	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.3992962	--
DT-EER (Drive Trace Energy Economy Rating)	-0.3639368	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.8026862	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0059993	--
N2O (Nitrous Oxide)	0.00225	--
HC-NM (Non-methane Hydrocarbon)	0.0082607	--
NMOG (Non-methane organic gases)	0.0090732	--
PM (Particulate Matter)	0.0006021	--
HC-TOTAL (Total Hydrocarbon)	0.0230675	--

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family				VGMXR015740B			
		Test Result Name		Unrounded Test Result			Verify Calculated CREE/OPT-CREE					
		Carbon-Related Exhaust Emissions		9999.9999999			999					
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		371.7904358			--					
Manufacturer Test Comments		None Unrounded Result for the following test results were modified by Verify: FE BAG 3, MFR FE, FE BAG 2, FE BAG 1										
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 30	CREE	999	1	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.57	1	--	--	--	--	0.6	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.59	1	--	--	--	--	0.6	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0091	1	--	--	--	--	0.009	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0151	1	--	--	--	--	0.015	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0122	1	--	--	--	--	0.012	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0060	1	--	--	--	--	0.006	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0006	1	--	--	--	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.57	1	--	--	--	--	0.6	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	CO-COMP	0.59	1	--	--	--	--	0.6	4.2	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0091	1	--	--	--	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0151	1	--	--	--	--	0.015	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX-COMP	0.0122	1	--	--	--	--	0.012	0.050	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0060	1	--	--	--	--	0.006	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0006	1	--	--	--	--	0.001	0.001	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	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Test #	TGMX91006335	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	04/10/2025	Fuel	Gasoline
Fuel Batch ID	29351	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4855	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	406.2213745	--
FE BAG 1 (Bag 1 Fuel Economy)	21.7712345	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	379.0060425	--
FE BAG 2 (Bag 2 Fuel Economy)	23.4542866	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	350.8723145	--
FE BAG 3 (Bag 3 Fuel Economy)	25.3256741	--
METHANE (CH4 - Methane)	0.0161328	--
CO (Carbon Monoxide)	0.8697892	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.068754	--
DT-EER (Drive Trace Energy Economy Rating)	-0.5725881	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.1464066	--
MFR FE (Manufacturer Fuel Economy)	23.556242	--
NOX (Nitrogen Oxide)	0.0096974	--
N2O (Nitrous Oxide)	0.0007844	--
HC-NM (Non-methane Hydrocarbon)	0.0111745	--
NMOG (Non-methane organic gases)	0.0116215	--
HC-TOTAL (Total Hydrocarbon)	0.0268138	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	378

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family				VGMXR015740B			
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		376.8988342			--					
Manufacturer Test Comments		None										
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 30	CREE	378	1	--	--	0	--	378	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.87	1	--	--	--	--	0.9	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0116	1	--	--	--	--	0.012	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0213	1	--	--	--	--	0.021	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0097	1	--	--	--	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.87	1	--	--	--	--	0.9	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0116	1	--	--	--	--	0.012	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0213	1	--	--	--	--	0.021	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0097	1	--	--	--	--	0.010	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	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B																																				
Test #	TGMX91006316	Test Procedure	3 - HWFE																																				
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)																																				
Test Date	03/28/2025	Fuel	Gasoline																																				
Fuel Batch ID	28637	Fuel Calibration Number	1																																				
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	--																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	4771	Odometer Units	M																																				
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																																				
State of Charge Delta	--																																						
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																				
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE																																					
Carbon-Related Exhaust Emissions	9999.9999999	999																																					
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Carbon dioxide	269.7034607	--																																					
Manufacturer Test Comments	None																																						

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family					VGMXR015740B		
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 30	CREE	999	1	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0001	1	--	--	--	--	0.000	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0011	1	--	--	--	--	0.001	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0010	1	--	--	--	--	0.001	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0001	1	--	--	--	--	0.000	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0011	1	--	--	--	--	0.001	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0010	1	--	--	--	--	0.001	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	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Test #	TGMX91006337	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	04/11/2025	Fuel	Gasoline
Fuel Batch ID	29351	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4874	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
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)	0.0026257	--
CO (Carbon Monoxide)	0.2511386	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	4.7081981	--
DT-EER (Drive Trace Energy Economy Rating)	-0.0453918	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	5.8151402	--
MFR FE (Manufacturer Fuel Economy)	33.5714264	--
NOX (Nitrogen Oxide)	0.0007972	--
N2O (Nitrous Oxide)	0.0001736	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0026016	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	265

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	265.0765076	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group		VGMXT02.5000				Evaporative/Refueling Family				VGMXR015740B		
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 30	CREE	265	1	--	--	0	--	265	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0000	1	--	--	--	--	0.000	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0008	1	--	--	--	--	0.001	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0008	1	--	--	--	--	0.001	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0000	1	--	--	--	--	0.000	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0008	1	--	--	--	--	0.001	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0008	1	--	--	--	--	0.001	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	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B																																																			
Test #	TGMX91006319	Test Procedure	90 - US06																																																			
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)																																																			
Test Date	04/04/2025	Fuel	Gasoline																																																			
Fuel Batch ID	28637	Fuel Calibration Number	1																																																			
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																																			
Verify Test Lab ID	--																																																					
E10 Evaporative Test Measurement Method	--																																																					
Test Start Odometer Reading	4808	Odometer Units	M																																																			
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																																																			
State of Charge Delta	--																																																					
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																																			
Test Results																																																						
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Manufacturer Test Comments	None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, MFR FE																																																					

Certification Summary Information Report

Test Group		VGMXT02.5000				Evaporative/Refueling Family				VGMXR015740B		
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 30	CO	0.47	1	--	--	--	--	0.5	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0039	1	--	--	--	--	0.004	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0152	1	--	--	--	--	0.015	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0113	1	--	--	--	--	0.011	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0016	1	--	--	--	--	0.002	0.006	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.47	1	--	--	--	--	0.5	99.9	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0039	1	--	--	--	--	0.004	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0152	1	--	--	--	--	0.015	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0113	1	--	--	--	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0016	1	--	--	--	--	0.002	0.003	Pass

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B																																	
Test #	TGMX10089809	Test Procedure	95 - SC03																																	
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)																																	
Test Date	02/12/2025	Fuel	Gasoline																																	
Fuel Batch ID	000329	Fuel Calibration Number	9407																																	
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																	
Verify Test Lab ID	Compliance and Certification																																			
E10 Evaporative Test Measurement Method	--																																			
Test Start Odometer Reading	4444	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																																	
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Manufacturer Test Comments	150K SC03 TEST																																			

Certification Summary Information Report

Test Group		VGMXT02.5000				Evaporative/Refueling Family				VGMXR015740B		
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 30	CO	0.71	1	--	--	--	--	0.7	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0014	1	--	--	--	--	0.001	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0072	1	--	--	--	--	0.007	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0058	1	--	--	--	--	0.006	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.71	1	--	--	--	--	0.7	99.9	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0014	1	--	--	--	--	0.001	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0072	1	--	--	--	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0058	1	--	--	--	--	0.006	99.999	Pass

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Fuel Properties			
Fuel Batch ID	29351	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	05/03/2023
Fuel Batch Calibration Effective Date	05/03/2023	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	0.742
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18439
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	27723	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	05/09/2019
Fuel Batch Calibration Effective Date	05/09/2019	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 (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17954
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	28637	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	08/26/2021
Fuel Batch Calibration Effective Date	08/26/2021	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	0.75
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17894
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	Weight Fraction CO2	--
Fuel Batch ID	000329	Fuel Calibration Number	9407
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	09/12/2024
Fuel Batch Calibration Effective Date	09/12/2024	Fuel Batch Calibration Ineffective Date	--

Certification Summary Information Report

Test Group		VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
Carbon Weight Fraction NMHC	--		Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--		Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--		Fuel Specific Gravity	0.75
Fuel Ethanol Volume Percent (%)	9.8		Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17800
Fuel Net Heat of Combustion (E10) (MJ/kg)	--		Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828		Weight Fraction CO2	--
Fuel Batch ID	000334		Fuel Calibration Number	9312
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)		Fuel Batch Calibration Date	09/05/2023
Fuel Batch Calibration Effective Date	09/05/2023		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	0.744
Fuel Ethanol Volume Percent (%)	9.7		Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17826
Fuel Net Heat of Combustion (E10) (MJ/kg)	--		Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827		Weight Fraction CO2	--

Certification Summary Information Report

Test Group	VGMXT02.5000	Evaporative/Refueling Family				VGMXR015740B			
Consolidated List of Standards									
Exhaust Standards									
Cert Region	California + CAA Section 177 states				Cert/In-Use Code		Cert		
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)				Standard Level		California LEV-III SULEV30		
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									
LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)									
Standard Level									
Federal Tier 3 Bin 30									
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

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family			VGMXR015740B	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III SULEV30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can 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	--	--	--	--	--	1.0
150,000 miles	CO-COMP	--	1	--	--	--	--	--	4.2
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.030
150,000 miles	NMOG+NOX-COMP	--	1	--	--	--	--	--	0.050
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.001

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
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		VGMXT02.5000			Evaporative/Refueling Family			VGMXR015740B	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can 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	--	1	--	--	--	--	0	999.999
150,000 miles	CO	--	1	--	--	--	--	--	1.0
150,000 miles	CO-COMP	--	1	--	--	--	--	--	4.2
150,000 miles	NMOG	--	1	--	--	--	--	--	99.999
150,000 miles	NMOG+NOX	--	1	--	--	--	1	--	0.030
150,000 miles	NMOG+NOX-COMP	--	1	--	--	--	--	--	0.050
150,000 miles	NOX	--	1	--	--	--	--	--	99.999
150,000 miles	PM	--	1	--	--	--	--	--	0.003

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III SULEV30	
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	--	--	--	--	--	12.5

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
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	--	0.030
150,000 miles	NOX	--	1	--	--	--	--	--	99.999

Certification Summary Information Report

Test Group		VGMXT02.5000			Evaporative/Refueling Family			VGMXR015740B	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III SULEV30	
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	--	--	--	--	--	0.003

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III SULEV30	
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	--	0.030
150,000 miles	NOX	--	1	--	--	--	--	--	99.999

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
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	--	--	--	--	--	12.5
120,000 miles	HC-NM	--	1	--	--	--	--	--	0.5

Evaporative/Refueling Standards

Certification Summary Information Report

Test Group		VGMXT02.5000		Evaporative/Refueling Family		VGMXR015740B	
Evaporative/Refueling Family		VGMXR015740B		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	--	0.450	0.0000		
Evaporative/Refueling Family		VGMXR015740B		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	0.000		
Evaporative/Refueling Family		VGMXR015740B		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	0.000		
Evaporative/Refueling Family		VGMXR015740B		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	0.000		
Evaporative/Refueling Family		VGMXR015740B		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	--	0.450	0.0000		

Certification Summary Information Report

Test Group		VGMXT02.5000		Evaporative/Refueling Family		VGMXR015740B	
Evaporative/Refueling Family		VGMXR015740B		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	--	0.450	0.0000		
Evaporative/Refueling Family		VGMXR015740B		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	0.0000		
Evaporative/Refueling Family		VGMXR015740B		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	--	0.450	0.0000		
Evaporative/Refueling Family		VGMXR015740B		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL	--	0.020	0.0000		
Evaporative/Refueling Family		VGMXR015740B		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	0.000		

Certification Summary Information Report

Test Group		VGMXT02.5000	Evaporative/Refueling Family	VGMXR015740B
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		VGMXT02.5000	Evaporative/Refueling Family		VGMXR015740B
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		VGMXT02.5000	Evaporative/Refueling Family		VGMXR015740B
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		VGMXT02.5000	Evaporative/Refueling Family		VGMXR015740B
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	

FLEXIBLE OR ALTERNATE FUELS

There are no flexible or alternate fuels certified for this test group.

Engine Code Information

Base Engine Code	1	2
EC Derivatives		
Test Group	VGMXT02.5000	VGMXT02.5000
Durability Group	VGMXGPGNNB02	VGMXGPGNNB02
Engine RPO	LK0	LK0
Disp, liters	2.5	2.5
Trans RPO	MF8	MF8
Trans Type	A8	A8
Product Code	--	--
Emission RPO	NLB	NLB
Emissions Category	SULEV30/BIN30	SULEV30/BIN30
Vehicle Type	TRUCK	TRUCK
Regulatory Agencies	F/C	F/C
Sales Area	FA/CA	FA/CA
Design Altitude	Both	Both
A/C Equipped	Yes	Yes
Driver Select Device	Tour/Start Stop/Powertrain Sport/Snow/Tow Haul	Tour/Start Stop/Powertrain Sport/AWD Disconnect/Snow/Tow Haul/Off Road/Terrain
Police Only	No	No
Horsepower @ RPM	328@5600	328@5600
Torque @ RPM	326@2000	326@2000
Emission Ctrl Sys	CAC/TC/DFI/WR-HO2S/TWC/HO2S	CAC/TC/DFI/WR-HO2S/TWC/HO2S
TapUp/TapDown	No	No
Active Fuel Management	Non AFM	Non AFM
Description	Traverse/Acadia/Enclave FWD LK0	Traverse/Acadia/Enclave AWD LK0

Vehicle Parameters - Certificate Coverage

Durability Group VGMXGPGNNB02
TestGroup VGMXT02.5000

EC	Der	Eng RPO	Disp	Evap Family	Evap Code	Model	Car Line	Trans Type/Code	Final Drive Ratio	GVWR	Tire	N/V	Loaded Weight Veh/DA	TWC Meth	TWC	TLHP	F0	F1	F2	RLHP RPO	Drv Sys	Note
1		LK0	2.5	VGMXR015740B	100	1LB56	TRAVERSE FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4801/272	LVW	4750	15.1	28.41	0.2827	0.02823	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LB56	TRAVERSE FWD	A8/1	3.49	6173	255/65R18 ALS BRI	24.2	4801/272	LVW	4750	14.6	26.51	0.2611	0.02801	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LB56	TRAVERSE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4801/272	LVW	4750	16.0	33.43	0.3051	0.02864	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LB56+VXT	TRAVERSE FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	5375/270	LVW	5250	15.5	30.98	0.2928	0.02823	&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LB56+VXT	TRAVERSE FWD	A8/1	3.49	6173	255/65R18 ALS BRI	24.2	5375/270	LVW	5250	15.0	28.97	0.2691	0.02804	&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LB56+VXT	TRAVERSE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	5375/270	LVW	5250	16.5	36.48	0.3173	0.02862	&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LD56	TRAVERSE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4801/272	LVW	4750	16.0	33.43	0.3051	0.02864	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LK56	TRAVERSE FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4801/272	LVW	4750	15.1	28.41	0.2827	0.02823	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1LK56	TRAVERSE FWD	A8/1	3.49	6173	255/65R18 ALS GDY	24.2	4801/272	LVW	4750	15.1	29.86	0.2023	0.02928	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	4LB56	ENCLAVE FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4975/279	LVW	5000	15.2	29.69	0.2877	0.02794	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	4LB56	ENCLAVE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4975/279	LVW	5000	16.5	34.95	0.3112	0.02920	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	4LD56	ENCLAVE FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4975/279	LVW	5000	15.2	29.69	0.2877	0.02794	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	4LD56	ENCLAVE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4975/279	LVW	5000	16.5	34.95	0.3112	0.02920	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	4LE56	ENCLAVE FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4975/279	LVW	5000	16.5	34.95	0.3112	0.02920	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1TD56	ACADIA FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4868/275	LVW	4750	15.2	28.41	0.2827	0.02859	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1TD56	ACADIA FWD	A8/1	3.49	6173	255/65R18 ALS BRI	24.2	4868/275	LVW	4750	14.7	26.51	0.2611	0.02838	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1TD56	ACADIA FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4868/275	LVW	4750	16.2	33.43	0.3051	0.02900	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1TLF56	ACADIA FWD	A8/1	3.49	6173	255/55R20 AL3 CON	24.2	4868/275	LVW	4750	15.2	28.41	0.2827	0.02859	&AXP&WNS	FD	--
1		LK0	2.5	VGMXR015740B	100	1TLF56	ACADIA FWD	A8/1	3.49	6173	275/45R22 AL3 CON	23.6	4868/275	LVW	4750	16.2	33.43	0.3051	0.02900	&AXP&WNS	FD	--
2		LK0	2.5	VGMXR015740B	101	1LB56+F48	TRAVERSE AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	4996/279	LVW	5000	16.0	30.01	0.4461	0.02696	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LB56+F48	TRAVERSE AWD	A8/2	3.49	6394	255/65R18 ALS BRI	24.2	4996/279	LVW	5000	15.5	28.05	0.4235	0.02694	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LB56+F48	TRAVERSE AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	4996/279	LVW	5000	16.9	35.27	0.4696	0.02723	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LC56	TRAVERSE AWD	A8/2	3.49	6394	265/65R18 AT GDY	23.6	4996/279	LVW	5000	16.6	28.98	0.4395	0.02940	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LD56+F48	TRAVERSE AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	4996/279	LVW	5000	16.9	35.27	0.4696	0.02723	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LK56+F48	TRAVERSE AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	4996/279	LVW	5000	16.0	30.01	0.4461	0.02696	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LK56+F48	TRAVERSE AWD	A8/2	3.49	6394	255/65R18 ALS GDY	24.2	4996/279	LVW	5000	16.5	31.62	0.3613	0.02957	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1LL56	TRAVERSE AWD	A8/2	3.49	6394	265/65R18 AT GDY	23.6	4996/279	LVW	5000	16.6	28.98	0.4395	0.02940	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	4LB56+F48	ENCLAVE AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	5171/286	LVW	5250	16.1	31.29	0.4511	0.02678	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	4LB56+F48	ENCLAVE AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5171/286	LVW	5250	17.1	36.79	0.4757	0.02717	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	4LD56+F48	ENCLAVE AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	5171/286	LVW	5250	16.1	31.29	0.4511	0.02678	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	4LD56+F48	ENCLAVE AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5171/286	LVW	5250	17.1	36.79	0.4757	0.02717	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	4LE56+F48	ENCLAVE AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5171/286	LVW	5250	17.1	36.79	0.4757	0.02717	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TD56+F48	ACADIA AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	5132/285	LVW	5250	16.3	31.29	0.4511	0.02733	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TD56+F48	ACADIA AWD	A8/2	3.49	6394	255/65R18 ALS BRI	24.2	5132/285	LVW	5250	15.9	29.29	0.4275	0.02733	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TD56+F48	ACADIA AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5132/285	LVW	5250	17.3	36.79	0.4757	0.02759	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLE56	ACADIA AWD	A8/2	3.49	6394	265/65R18 AT GDY	23.6	5132/285	LVW	5250	16.8	30.31	0.4446	0.02942	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLF56+F48	ACADIA AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	5132/285	LVW	5250	16.3	31.29	0.4511	0.02733	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLF56+F48	ACADIA AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5132/285	LVW	5250	17.3	36.79	0.4757	0.02759	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLK56	ACADIA AWD	A8/2	3.49	6394	265/65R18 AT GDY	23.6	5132/285	LVW	5250	16.8	30.31	0.4446	0.02942	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLL56	ACADIA AWD	A8/2	3.49	6394	255/55R20 AL3 CON	24.2	5132/285	LVW	5250	16.3	31.29	0.4511	0.02733	&AXP&WNS	AD	--
2		LK0	2.5	VGMXR015740B	101	1TLL56	ACADIA AWD	A8/2	3.49	6394	275/45R22 AL3 CON	23.6	5132/285	LVW	5250	17.3	36.79	0.4757	0.02759	&AXP&WNS	AD	--

GM elects to test at the next higher test weight class where applicable (reference 40CFR86.1831-01(b)(3)).

TRANSMISSION INFORMATION

Test Group ID	VGMXT02.5000	VGMXT02.5000
Transmission Code	1	2
Transmission RPO	MF8	MF8
Transmission Type	A8	A8
Drive Gear Ratios	4.69,3.31,3.01,1.92,1.45,1,0.75,0.62	4.69,3.31,3.01,1.92,1.45,1,0.75,0.62
Chain Drive Ratio	1.071	1.071
Shift Calibrations	Computer Controlled	Computer Controlled
Torque Converter Diameter	228	228
Torque Converter Stall Torque Ratio	1.96	1.96
Torque Converter Lockup RPM'S	Computer Controlled	Computer Controlled
Torque Converter Stall Torque Speed	2480@119	2480@119
Multimode Feature - # of Modes	5	6
Shift Indicator Light	N	N
Description	C1YC-2/C1YG-2/C1YB-2 MF8 - 8T65 ETRS	C1YC-2/C1YG-2/C1YB-2 MF8 - 8T65 ETRS
TapUp/TapDown	FWD No	AWD No

SPECIAL TEST INSTRUCTIONS

DRIVER SELECTABLE MODES

Tow/Haul Mode:

Some vehicles are equipped with a trailer tow switch. To select the trailer tow mode, depress the trailer tow switch. The trailer tow light on the instrument panel cluster will illuminate. To go back to the normal operation, press the switch again. The indicator light on the instrument cluster will go out. Upon an engine restart, the trailer tow switch must be reactivated to enter the trailer tow mode.

Enhanced Dyno Mode:

Make sure the steering wheel is straight. With the key OFF, apply more than 5% but less than 20% brake pedal pressure and hold 100% accelerator pedal. Open and close the driver's door 5 times within 10 seconds. Then turn the key ON and verify that the DIC displays the message: "Chassis dyno mode is active".

Other Modes:

Some vehicles are equipped with additional driver selectable modes. These vehicles are equipped with either additional gear shifter positions or a mode selection switch to engage each mode. Please refer to the Owner's Manual for specific instructions on how to engage each mode.

OTHER

Drive Trace Tolerances:

The driver must attempt to follow the target schedule as closely as possible. Instantaneous speeds must stay within the following tolerances. The upper limit is 2.0 mph higher than the highest point on the trace within 1.0 s of the given point in time. The lower limit is 2.0 mph lower than the lowest point on the trace within 1.0 s of the given time.

Emission Test Vehicle Cooling Requirements:

All testing for this test group must use a road speed fan on all regulated test cycles, as allowed by the regulations. PrimeOne RSF was used on FTP75/HWY/US06, 10 inches high and 12 inches in front of the vehicle, center on grille. A WindTunnel RSF was used on FTP20 at a similar distance and height. For the SC03 test, a road speed fan (SC03 Tunnel RSF) that has a nominal capacity of 95000 cfm at 60 mph was used.

SPECIAL TEST INSTRUCTIONS (CONT.)

Canister Loading:

Most General Motors vehicles have a service port for the evaporative system. For vehicles that are not equipped with a service port, an evap service access port tool must be utilized. The evap service access port tool should be installed between the purge solenoid and the purge line from the evap canister. Purging and loading of the evaporative emissions canister must be done through this service port or service port tool. The service port and service port tool consists of a Schrader valve which is in series with the purge line. It can be identified by its green cap.

Fuel System Leak Test Procedure:

For evaporative emission families that are certified to Tier 3 and LEV 4 evaporative emission requirements, a fuel system leak test may need to be conducted. To conduct this testing, the outlet of the canister should be sealed. The fuel system is then pressurized by applying nitrogen through the service port. Service port details are outlined in the canister loading instructions.

Evaporative Emissions Testing:

For evaporative emissions testing conducted with test fuels that contain ethanol, General Motors utilizes a photo acoustic infrared analyzer to measure evaporative emissions.

Four-Wheel and All-Wheel Drive Vehicles:

Please contact General Motors Compliance and Certification organization for instructions on how to disable the four-wheel and all-wheel drive systems.

Traction Control and Anti-Lock Braking System (ABS):

Most General Motors vehicles come equipped with an electronic traction control system and an ABS system. During dynamometer testing, these systems will detect the difference in wheel speed between the front and rear wheels, and attempt to correct it by activating ABS and changing engine operation. Therefore, before emissions testing, the systems must be disabled. Please contact General Motors Compliance and Certification organization for instructions.

Vehicle Moving Procedures for Electronic Transmission Range Selection Equipped Vehicles:

Some General Motors vehicles are equipped with an Electronic Transmission Range Selection (ETRS) transmission. Please contact General Motors Compliance and Certification organization for instructions on how to move these vehicles in the test lab.

Automatic Headlight Systems:

Headlight must be turned off before each emissions or fuel economy test. Please refer to the owner's manual for the location of the switch that controls the headlights.

Tire Pressure and Ballast:

Some vehicles in this test group may require additional ballast and reduction of tire pressure to prevent wheel slip. Please add ballast and change the tire pressure prior to emissions testing, according to the list below. For engine codes not listed, testing should be conducted as specified in the vehicle parameters page.

ENGINE STARTING INSTRUCTIONS

Warm or Cold Engine

For vehicles using a key, do not press down on the accelerator pedal. With your foot off the pedal, crank the engine by turning the ignition key to "Start". Release the key when the engine starts.

For vehicles using a push button start, the keyless access transmitter must be inside the vehicle for the ignition to work. To start the vehicle, do the following: With your foot on the brake pedal, press the START button located on the instrument panel. When the engine begins cranking, let go of the button and the engine cranks automatically until it starts.

Reference Owner's Manual for complete starting instructions.

SHIFT SCHEDULES

<u>Trans Code</u>	<u>Shift Schedule</u>				<u>Recommended Shift Speeds (mph)</u>							
	<u>FTP</u>	<u>Hwy</u>	<u>SC03</u>	<u>US06*1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	

NA – Not Applicable



April 27, 2026

VP034

Mr. D. Cullen
U.S. Environmental Protection Agency
Office of Transportation & Air Quality
Certification & Compliance Division
2000 Traverwood
Ann Arbor, MI 48105

Dear Mr. Cullen:

Subject: Request for Certificate of Conformity - General Motors 2027 Test Group/
Evaporative Family VGMXT02.5000/VGMXR015740B

General Motors requests that the EPA issue a certificate of conformity for the subject test group/evaporative family. GM requests the EPA review this application promptly to expedite final approval of the certificate of conformity for the subject test group. Attached to this request is the Part 1 Application.

GM requests that the EPA treat the information contained in this Part 1 Application, or information subsequently submitted for inclusion in this application, as confidential business information under 40 C.F.R. Part 2, Subpart B, and 5 U.S.C. § 552. The EPA's General Counsel made a class determination that information contained in applications for certification is entitled to confidential treatment (see Class Determination 1-13). As such, GM requests that the information described in each Table of the Class Determination be accorded confidential treatment in accordance with the time periods specified.

GM attests that the test group complies with all applicable regulations contained in 40 C.F.R. Parts 85 and 86, and the applicable California Amendments of the EPA regulations it has incorporated, and Title 13 of the California Code of Regulations.

Please review this information as soon as possible and call if you should have any questions regarding this request for a certificate of conformity.

Sincerely,

A. Lotsof

A. Lotsof
Total Certification Engineer
Compliance & Certification

AL/ks

general motors

GM Proving Ground / Compliance & Certification / M/C 483-331-500 / 3300 GM Rd. / Milford, MI 48380-3726



April 27, 2026

VP035

Ms. Robin U. Lang, Chief
Emissions Certification and Compliance Division
California Air Resources Board
4001 Iowa Avenue
Riverside, CA 92507

Dear Ms. Lang:

Subject: Request for Executive Order - General Motors 2027 Test Group/Evaporative Family
VGMXT02.5000/VGMXR015740B

General Motors requests that CARB issue an executive order for the subject test group. GM requests that the CARB treat the information contained in this Part 1 Application, or information subsequently submitted for inclusion in this application, as confidential business information pursuant to the California Public Records Act and Sections 91000-91022 of Title 17 of the California Code of Regulations. The information is confidential and sensitive GM business information that constitutes trade secrets and commercial or financial information within the meaning of Section 6254.7 of the California Public Records Act, is entitled to confidential treatment, and will cause substantial competitive harm to GM if released. In the event that CARB does not agree with our position regarding confidential treatment of this information or is considering the public release of this confidential, trade secret, and commercial or financial information, or receives a request for disclosure of the information, we request that you first provide notice to me and we request the opportunity to discuss the material and the need to maintain the confidentiality of this information with you or the CARB General Counsel before any decision is made regarding its release. GM requests that the information be accorded confidential treatment indefinitely.

GM attests that the test group complies with all applicable regulations contained in 40 C.F.R. Parts 85 and 86, and the applicable California Amendments of the EPA regulations that CARB has incorporated and Title 13 of the California Code of Regulations.

GM recognizes that on June 12, 2025, a Congressional Review Act resolution came into effect disapproving the waiver that EPA had issued to CARB granting it authority to enforce the LEV IV regulation, which would have previously controlled for this executive order. In response to CARB's emergency request to temporarily reinstate the agency's LEV III regulations, EPA advised CARB that "...even if a preexisting regulation previously obtained a waiver, such waiver is no longer extant if the regulation became ineffective at any time, whether through the passage of time, repeal, or by any other means." On October 2, 2025, the California Office of Administrative Law approved CARB's emergency amendment intended to temporarily reinstate the agency's LEV III regulations. On March 26, 2026, OAL approved CARB's 90-day extension of its emergency amendment through July 1, 2026. In requesting an executive order consistent with the temporary emergency amendment, GM is not taking a position with respect to the validity or enforceability of any CARB requirements that may have been subject to Congressional Review Act resolutions or for which an EPA waiver of preemption has become ineffective.

general motors

GM Proving Ground / Compliance & Certification / M/C 483-331-500 / 3300 GM Rd. / Milford, MI 48380-3726

The EPA certificate of conformity for this test group will be forwarded to you when it becomes available.

Based upon our review prior to submitting the application for certification and to the best of our current information and belief, the GM vehicles described in this request for executive order do not employ defeat devices, and do not use alternative maps or AECDs that have not been declared, nor does our emission control system include strategies that link transmission controls (input or output) to these AECDs. In addition, we do not use control strategies that would trigger different transmission behavior when driven on an official emission test compared to when driven on the road under the same conditions. We are submitting this statement to you in good faith. If, in the future, we identify any new relevant information, we will notify CARB in a timely fashion.

Please review this information as soon as possible and call if you have any questions regarding this request for an executive order.

Sincerely,

A. Lotsof

A. Lotsof
Total Certification Engineer
Compliance & Certification

AL/ks

EMISSION DATA RATIOS (GASOLINE)

	<u>Data Ratios</u>
NMHC (G/MI) *1	NA
NMOG (G/MI) *2	NA
HCHO (G/MI) *4	NA
NMOG:NMHC *2 (E0 TIER2)	1.04
NMOG:NMHC *3 (E10 LEV3)	1.10 (Cold Start Tests)
NMOG:NMHC *3 (E10 LEV3)	1.03 (Hot Start Tests)
NMOG:NMHC *5 (E10 TIER3)	See Below
NMOG:NMHC *6 (E10 TIER3)	1.03 (Hot Start Tests)
HCHO:NMHC *2	NA

*1 NMHC includes methane response factor.

*2 Effective with the 2004 model year, both EPA and CARB have, through regulatory change, established an industry 1.04 NMHC to NMOG factor which can be used for cert testing for all gasoline tests (does not apply to alcohol fuels).

*3 Effective with LEV3 regulations, 1.10 NMHC to NMOG factor (cold start tests) and 1.03 NMHC to NMOG factor (hot start tests) can be used for cert testing for all gasoline tests (does not apply to alcohol fuels).

*4 HCHO requirements will now be met by a compliance statement for both EPA and CARB (does not apply to alcohol fuels).

*5 Effective with TIER3 regulations, the NMHC to NMOG conversion ratio for cold start tests is a calculation based 1066.635 which is represented by the following:

$$e_{\text{NMOGcomp}} = e_{\text{NMHCcomp}} * (1.0302 + (0.0071 * VP_{\text{EtOH}})) \text{ \{Eq. 1066.635-3\}}$$

*6 Effective with TIER3 regulations, 1.03 NMHC to NMOG factor (hot start tests) can be used for certification testing for all gasoline tests (does not apply to alcohol fuels).

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Feb 27 2026 13:56:08



**VEHICLE EMISSION
CONTROL INFORMATION**



**GENERAL
MOTORS
LLC**

Conforms to Regulations: 2027

U.S. EPA class / stds: LDT / BIN30

California class / stds: LDT / SULEV30

Group: VGMXT02.5000

Evap: VGMXR015740B

TC/CAC/DFI/WR-HO2S/TWC/HO2S, CA OBD: II

Fuel: Gasoline

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Date: 2602

L2027LK0NLBVXTWNS

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1FS3528838



4YGA17

Feb 27 2026 13:56:09



**VEHICLE EMISSION
CONTROL INFORMATION**



**GENERAL
MOTORS
LLC**

Conforms to Regulations: 2027 Incomplete

U.S. EPA class / stds: LDT / BIN30

California class / stds: LDT / SULEV30

Group: VGMXT02.5000

Evap: VGMXR015740B

TC/CAC/DFI/WR-HO2S/TWC/HO2S, CA OBD: II

Fuel: Gasoline

L2027LK0NLBVXTWNS

Date: 2602