Certification Summary Information Report

Manufacturer	Kia Corporation	**Manufacturer Code**	KMX
Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
Certificate Number	VKMXT02.5MP3-001	**CARB Executive Order #**	--
Certificate Issue Date	12/15/2025	**Certificate Revision Date**	--
Certificate Effective Date	01/02/2026	**Conditional Certificate**	No
CSI Revision #	--	**CSI Submission/Revision Date**	10/01/2025 01:58:44 AM
Model Year	2027		

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

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	VKMXGPGNNMP3	**Durability Group Equivalency Factor**	1.0
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	01/03/2026	**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**	VKMXT02.5MP3
Test Group OBD Compliance Level	Full - no deficiencies	**Number of Test Group OBD Deficiencies**	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	The fuel for Litmus test is E10. Litmus result(Value/Threshold): City(17.2/16.6) HWY(21.9/22.3). Test No: VKMX91006591(FTP),VKMX91006590(HWY),VKMX10091531(US06),VKMX10091530(SC03),VKMX10091532(Cold)		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Evaporative/Refueling Family Information

Evaporative Summary Information Type	New	**Submission/Correction Date**	09/18/2025 08:56:16 PM
Integrated ORVR?	Yes	**Fuel(s)**	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Plastic	**Fuel Tank Material Description**	Plastic
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	Yes	**Air Intake System Vapor Storage Device Description**	HC-Trap
Fuel System Vapor Storage Canister?	Yes	**Other Vapor Storage**	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	151	**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
VKMXR0151MPG-LQ2	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
Kia Corporation	1 - KIA	101 - Telluride FWD	California + CAA Section 177 states	2-Wheel Drive, Front	Semi-Automatic	8	Yes
Kia Corporation	1 - KIA	101 - Telluride FWD	Federal	2-Wheel Drive, Front	Semi-Automatic	8	Yes
Kia Corporation	1 - KIA	102 - Telluride X-PRO	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Kia Corporation	1 - KIA	100 - Telluride AWD	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Kia Corporation	1 - KIA	100 - Telluride AWD	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Kia Corporation	1 - KIA	102 - Telluride X-PRO	Federal	All Wheel Drive	Semi-Automatic	8	Yes

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Engine Description

Hybrid Type	--	**Hybrid Description**	--
Engine Type	4-Stroke Spark Ignition	**Mfr Engine Description**	--
Engine Block Arrangement	Inline	**Mfr Engine Block Arrangement Description**	--
Camless Valvetrain Indicator	No	**Oil Viscosity/Classification**	SAE 0W-30
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	Platinum + Palladium + Rhodium	Ceramic	Monolith
2	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic	Monolith
3	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic	Monolith

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

Engine Configuration Number 1

Engine Displacement (liters)	2.5	**Engine Rated Horsepower**	258
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**	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Fixed3(More than two or continuous)		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	2	**Number of Air/Fuel Sensors**	2
Air/Fuel Sensor # 1 Type	Other	**Air/Fuel Sensor # 1 Description**	WR-HO2S
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	No		
Air Injection Type	Not Applicable	**Air Injection Type if 'Other'**	--
Mfr Engine Configuration Comments	--		

Certification Summary Information Report

Test Group	VKMXT02.5MP3	Evaporative/Refueling Family	VKMXR0151MPG

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
Gasoline	VKMX91006591	VKMX10091531	VKMX10091530	VKMX10091532	VKMX91006590	35.7	16.6	20.8	22.3	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Gasoline	VKMX91006591	VKMX10091531	VKMX10091530

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Emission Data Vehicle Information

Vehicle ID / Configuration	KA4U2L5GA069F / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	NKMXT03.5KU5	**Original Evaporative/Refueling Family**	NKMXR0155KUG
Original Test Vehicle Model Year	2022		

Vehicle Model

Represented Test Vehicle Make	KIA	**Represented Test Vehicle Model**	CARNIVAL

Leak Family Details

Leak Family Identifier	KA4	**Leak Family Name**	NKMXR0155KUG-KA4

Drive Sources and Fuel System Details

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**	1.0003
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	G6DT-AC	**Rated Horsepower**	290
Displacement (liters)	3.5		
Air Aspiration Method	Naturally Aspirated	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	--	**Air Aspiration Device Configuration**	--
Charge Air Cooler Type	--	**Drive Mode While Testing**	2-Wheel Drive, Front
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4535	**Equivalent Test Weight (pounds)**	4750
GVWR (lbs)	6041	**N/V Ratio**	27
Axle Ratio	3.51		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	8
Transmission Lockup	Yes	**Creeper Gear**	No

Dynamometer Coefficients:

	Target Coefficients			Set Coefficients			
Coefficient Category	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**A (lbf)**	**B (lbf/mph)**	**C (lbf/mph**2)**	**EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients**
City/Highway/Evap	26.773	0.39493	0.027419	8.532	0.23356	0.027937	15.3

Emission Control Device Comments --

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Manufacturer Test Vehicle Comments KA4 3.5 8AT 19" EVAP

Test #	**NKMX10066867**	**Test Procedure**	**38 - CA fuel 3-day evap.**
Exhaust Test # for this Evap Test	NKMX10066851	**Test Fuel Type**	46 - CARB LEV3 E10 Regular Gasoline
Test Date	07/24/2020	**Fuel**	Gasoline
Fuel Batch ID	19E-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4225	**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 (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2745	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750)-3DBL

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	0.2745	0	0.274	0.5	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2745	0	0.274	0.5	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX91004661**	**Test Procedure**	**27 - California fuel 2-day evap**
Exhaust Test # for this Evap Test	NKMX91004658	**Test Fuel Type**	46 - CARB LEV3 E10 Regular Gasoline
Test Date	11/04/2020	**Fuel**	Gasoline
Fuel Batch ID	26757	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4363	**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)	0.215781	--

Manufacturer Test Comments Hot_Soak_HC_(g) = 0.024241, Diurnal (gHC) = 0.191540

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	0.2158	0	0.216	0.5	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2158	0	0.216	0.5	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX10066866**	**Test Procedure**	**37 - California Fuel Running Loss**
Exhaust Test # for this Evap Test	NKMX10066851	**Test Fuel Type**	46 - CARB LEV3 E10 Regular Gasoline
Test Date	07/24/2020	**Fuel**	Gasoline
Fuel Batch ID	19E-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4225	**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 (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0001	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750) CA E10-RL

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	0	0	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0	0	0	0.05	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX10066868**	**Test Procedure**	**24 - Federal fuel refueling test (ORVR)**
Exhaust Test # for this Evap Test	NKMX10066859	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	07/21/2020	**Fuel**	Gasoline
Fuel Batch ID	19T-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4157	**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 (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0011	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750) CA E10-ORVR

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	0	0.2	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.001	0	0	0.2	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX10066870**	**Test Procedure**	**65 - Evap Canister Bleed Test**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	46 - CARB LEV3 E10 Regular Gasoline
Test Date	07/09/2020	**Fuel**	Gasoline
Fuel Batch ID	19E-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4112	**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 (miles per gallon)
HC-TOTAL (Total Hydrocarbon)	0.0061	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750) CA E10-Bleed

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	0.0061	0	0.006	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL	0.0061	0	0.006	0.02	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX10066871**	**Test Procedure**	**68 - Leak Test - Port Near Fuel Pipe**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	07/28/2020	**Fuel**	Gasoline
Fuel Batch ID	19T-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4253	**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
LEAK-DIA (Effective Leak Diameter (inches))	0	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750) CA E10-Leak Test Port Near Fuel Pipe-Correct Odometer

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	LEAK-DIA	0	0	0	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	LEAK-DIA	0	0	0	0.02	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**NKMX10066872**	**Test Procedure**	**67 - Leak Test - Port Near Canister**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	07/28/2020	**Fuel**	Gasoline
Fuel Batch ID	19T-03	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4253	**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
LEAK-DIA (Effective Leak Diameter (inches))	0	--

Manufacturer Test Comments 22MY KA4 3.5 19"(ETW:4750) CA E10-Leak Test Port Near Canister-CORRECT ODORMETER

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	LEAK-DIA	0	0	0	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	LEAK-DIA	0	0	0	0.02	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Emission Data Vehicle Information

Vehicle ID / Configuration	LQ2HAU6H5TA100A / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	VKMXT02.5MP3	**Original Evaporative/Refueling Family**	VKMXR0151MPG
Original Test Vehicle Model Year	2027		

Vehicle Model

Represented Test Vehicle Make	Kia	**Represented Test Vehicle Model**	Telluride

Leak Family Details

Leak Family Identifier	LQ2	**Leak Family Name**	VKMXR0151MPG-LQ2

Drive Sources and Fuel System Details

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**	0.9997
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	G4KP-AC	**Rated Horsepower**	274
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**	2-Wheel Drive, Front
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4729	**Equivalent Test Weight (pounds)**	5250
GVWR (lbs)	6261	**N/V Ratio**	26.2
Axle Ratio	3.51		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	8
Transmission Lockup	Yes	**Creeper Gear**	No

Certification Summary Information Report

Test Group	VKMXT02.5MP3	Evaporative/Refueling Family	VKMXR0151MPG

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	39.277	0.50035	0.026036	20.346	0.21615	0.027415	17.3
Cold CO	43.205	0.55039	0.02864	12.806	-0.07055	0.032817	N/A
US06	39.277	0.50035	0.026036	20.346	0.21615	0.027415	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments Telluride X-PRO 2.5 8AT 18in X-Pro 5250 AWD. TYPO of EVAP family was corrected.

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX10091532**	**Test Procedure**	**11 - Cold CO**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	06/19/2025	**Fuel**	Gasoline
Fuel Batch ID	25D-01	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4464	**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**	Yes

Test Results

Certification Summary Information Report

Test Group	VKMXT02.5MP3	Evaporative/Refueling Family	VKMXR0151MPG

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	539	--
CO BAG 1 (Bag 1 Carbon Monoxide)	0.83	--
FE BAG 1 (Bag 1 Fuel Economy)	16.1	16.1
CH4 BAG 1 (Bag 1 Methane)	0.14	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.205	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	452	--
CO BAG 2 (Bag 2 Carbon Monoxide)	0.05	--
FE BAG 2 (Bag 2 Fuel Economy)	19.3	19.3
CH4 BAG 2 (Bag 2 Methane)	0	--
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.003	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	383	--
CO BAG 3 (Bag 3 Carbon Monoxide)	0	--
FE BAG 3 (Bag 3 Fuel Economy)	22.7	22.7
CH4 BAG 3 (Bag 3 Methane)	0	--
NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.008	--
METHANE (CH4 - Methane)	0.0082	--
CO (Carbon Monoxide)	0.1977	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.89	--
DT-EER (Drive Trace Energy Economy Rating)	-0.84	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.12	--
MFR FE (Manufacturer Fuel Economy)	19.2902	19.2902
NOX (Nitrogen Oxide)	0.0062	--
HC-NM (Non-methane Hydrocarbon)	0.0289	--
NMOG (Non-methane organic gases)	0.0318	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	451.0887	--

Manufacturer Test Comments LQ2 2.5T X-PRO 5250 18inch E10 - Cold FTP (Normal mode) Typo of fuel batch ID was corrected to 25D-01 NMHC result is added.

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

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	0.2	--	--	--	0.06	--	0.3	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	HC-NM	0.03	--	--	--	0.0016	--	0	0.5	Pass
CA	50,000 miles	California LEV-IV SULEV30	CO	0.2	--	--	--	0.06	--	0.3	12.5	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX10091533**	**Test Procedure**	**52 - Fed. fuel 50 F exh.**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	06/10/2025	**Fuel**	Gasoline
Fuel Batch ID	25T-02	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4339	**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**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0032	--
CO (Carbon Monoxide)	0.0646	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.69	--
DT-EER (Drive Trace Energy Economy Rating)	-1.16	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.51	--
MFR FE (Manufacturer Fuel Economy)	21.6902	21.6902
NOX (Nitrogen Oxide)	0.0068	--
NMOG (Non-methane organic gases)	0.0042	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	402.8559	--

Manufacturer Test Comments LQ2 2.5T X-PRO 5250 18inch E10 - 50F (Normal mode)

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	4,000 miles	California LEV-IV SULEV30	CO	0.06	--	--	--	--	--	0.1	1.0	Pass
CA	4,000 miles	California LEV-IV SULEV30	NMOG	0.0042	--	1.1	--	--	--	0.004	99.999	Pass
CA	4,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.011	--	--	--	--	--	0.011	0.060	Pass
CA	4,000 miles	California LEV-IV SULEV30	NOX	0.0068	--	--	--	--	--	0.007	99.999	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX91006591**	**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	09/05/2025	**Fuel**	Gasoline
Fuel Batch ID	43732	**Fuel Calibration Number**	2
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	4963	**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**	Yes

Test Results

Certification Summary Information Report

Test Group	VKMXT02.5MP3	Evaporative/Refueling Family	VKMXR0151MPG

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	432.5580444	--
CO BAG 1 (Bag 1 Carbon Monoxide)	0.212431	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CH4 BAG 1 (Bag 1 Methane)	0.007507	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0488925	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	409.5108948	--
CO BAG 2 (Bag 2 Carbon Monoxide)	0	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CH4 BAG 2 (Bag 2 Methane)	0.0025808	--
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0004416	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	384.093689	--
CO BAG 3 (Bag 3 Carbon Monoxide)	0.0039043	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
CH4 BAG 3 (Bag 3 Methane)	0.0020411	--
NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0000386	--
METHANE (CH4 - Methane)	0.0034517	--
CO (Carbon Monoxide)	0.0449999	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.4601968	--
DT-EER (Drive Trace Energy Economy Rating)	-0.0818733	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.2842916	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0080556	--
N2O (Nitrous Oxide)	0.0021071	--
HC-NM (Non-methane Hydrocarbon)	0.0094042	--
NMOG (Non-methane organic gases)	0.0103272	--
PM (Particulate Matter)	0.0003131	--
HC-TOTAL (Total Hydrocarbon)	0.0127479	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	407

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	407.3131714	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 2, MFR FE, FE BAG 1, FE BAG 3

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

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	407	--	--	--	0.247782	--	407	--	--
Fed	120,000 miles	Federal Tier 3 Bin 30	METHANE	0.0035	--	--	--	0.0019	--	0.005	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	N2O	0.0021	--	--	--	0.0024	--	0.004	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.04	--	--	--	0.18	--	0.2	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.23	--	--	--	0	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0103	--	1.1	--	0.0022	--	0.012	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0184	--	--	--	--	--	0.023	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0187	--	--	--	0	--	0.019	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0081	--	--	--	0.0028	--	0.011	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0003	--	--	--	0	--	0	0.003	Pass
CA	150,000 miles	California LEV-IV SULEV30	CO	0.04	--	--	--	0.18	--	0.2	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0103	--	1.1	--	0.0022	--	0.012	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0184	--	--	--	--	--	0.023	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0081	--	--	--	0.0028	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	PM	0.0003	--	--	--	0	--	0	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	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX91006590**	**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	09/05/2025	**Fuel**	Gasoline
Fuel Batch ID	43732	**Fuel Calibration Number**	2
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	4974	**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**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0004405	--
CO (Carbon Monoxide)	0.0138188	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.5805302	--
DT-EER (Drive Trace Energy Economy Rating)	-0.299486	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	5.1691642	--
MFR FE (Manufacturer Fuel Economy)	32.4149513	--
NOX (Nitrogen Oxide)	0.0022357	--
N2O (Nitrous Oxide)	0.0002274	--
HC-NM (Non-methane Hydrocarbon)	0.0007036	--
NMOG (Non-methane organic gases)	0.0007247	--
HC-TOTAL (Total Hydrocarbon)	0.0011303	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	268

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	268.4006042	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	120,000 miles	Federal Tier 3 Bin 30	CREE	268	--	--	--	0.247782	--	268	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0007	--	1.03	--	0.0022	--	0.003	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0029	--	--	--	--	--	0.008	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0022	--	--	--	0.0028	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0.0007	--	1.03	--	0.0022	--	0.003	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0029	--	--	--	--	--	0.008	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0022	--	--	--	0.0028	--	0.005	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	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX10091531**	**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	06/03/2025	**Fuel**	Gasoline
Fuel Batch ID	25T-02	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4277	**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**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	694	--
CO BAG 1 (Bag 1 Carbon Monoxide)	0	--
FE BAG 1 (Bag 1 Fuel Economy)	12.6	12.6
CH4 BAG 1 (Bag 1 Methane)	0.004	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	376	--
CO BAG 2 (Bag 2 Carbon Monoxide)	0.17	--
FE BAG 2 (Bag 2 Fuel Economy)	23.2	23.2
CH4 BAG 2 (Bag 2 Methane)	0.002	--
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--
METHANE (CH4 - Methane)	0.0028	--
CO (Carbon Monoxide)	0.1301	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.94	--
DT-EER (Drive Trace Energy Economy Rating)	-2.06	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.57	--
MFR FE (Manufacturer Fuel Economy)	19.5952	19.5952
NOX (Nitrogen Oxide)	0.0143	--
NMOG (Non-methane organic gases)	0	--
PM (Particulate Matter)	0.0028	--

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	446.1902	--

Manufacturer Test Comments LQ2 2.5T X-PRO 5250 18inch E10 - US06 (Normal mode)

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	0.1301	--	--	--	0.18	--	0.31	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.03	--	0.0022	--	0.002	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0143	--	--	--	--	--	0.019	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0143	--	--	--	0.0028	--	0.017	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0028	--	--	--	0	--	0.003	0.006	Pass
CA	150,000 miles	California LEV-IV SULEV30	CO	0.13	--	--	--	0.18	--	0.3	9.6	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0	--	1.03	--	0.0022	--	0.002	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0143	--	--	--	--	--	0.019	0.036	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0143	--	--	--	0.0028	--	0.017	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	PM	0.0028	--	--	--	0.0006	--	0.003	0.006	Pass

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Test #	**VKMX10091530**	**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	06/06/2025	**Fuel**	Gasoline
Fuel Batch ID	25T-02	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	772-1, Jangduck-Dong		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4324	**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**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0013	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.4	--
DT-EER (Drive Trace Energy Economy Rating)	-1.15	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.14	--
MFR FE (Manufacturer Fuel Economy)	18.7229	18.7229
NOX (Nitrogen Oxide)	0.0088	--
NMOG (Non-methane organic gases)	0	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	466.6815	--

Manufacturer Test Comments LQ2 2.5T X-PRO 5250 18inch E10 - SC03 (Normal mode)

Certification Summary Information Report

Test Group VKMXT02.5MP3 **Evaporative/Refueling Family** VKMXR0151MPG

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0	--	--	--	0.18	--	0.18	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0	--	1.03	--	0.0022	--	0.002	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0088	--	--	--	--	--	0.014	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0088	--	--	--	0.0028	--	0.012	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	CO	0	--	--	--	0.18	--	0.2	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG	0	--	1.03	--	0.0022	--	0.002	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV30	NMOG+NOX	0.0088	--	--	--	--	--	0.014	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV30	NOX	0.0088	--	--	--	0.0028	--	0.012	99.999	Pass

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Fuel Properties

Fuel Batch ID	**19E-03**	**Fuel Calibration Number**	**1**
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	**Fuel Batch Calibration Date**	08/08/2019
Fuel Batch Calibration Effective Date	10/29/2019	**Fuel Batch Calibration Ineffective Date**	10/29/2022
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)**	17917
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	**25D-01**	**Fuel Calibration Number**	**1**
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	**Fuel Batch Calibration Date**	02/25/2025
Fuel Batch Calibration Effective Date	04/02/2025	**Fuel Batch Calibration Ineffective Date**	04/02/2028
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 (%)	9.9	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.694	**Fuel Carbon Mass Fraction (E10)**	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	**Weight Fraction CO2**	--

Fuel Batch ID	**19T-03**	**Fuel Calibration Number**	**1**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	08/22/2019
Fuel Batch Calibration Effective Date	04/13/2020	**Fuel Batch Calibration Ineffective Date**	04/13/2023
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 (%)	9.8	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17949
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	**Weight Fraction CO2**	--

Fuel Batch ID	**43732**	**Fuel Calibration Number**	**2**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	06/13/2025
Fuel Batch Calibration Effective Date	06/13/2025	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.749
Fuel Ethanol Volume Percent (%)	9.6	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17885
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.37	**Fuel Carbon Mass Fraction (E10)**	0.83
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	**Weight Fraction CO2**	--
Fuel Batch ID	**25T-02**	**Fuel Calibration Number**	**1**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	08/22/2024
Fuel Batch Calibration Effective Date	03/14/2025	**Fuel Batch Calibration Ineffective Date**	03/14/2028
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 (%)	9.8	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.498	**Fuel Carbon Mass Fraction (E10)**	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	**Weight Fraction CO2**	--
Fuel Batch ID	**26757**	**Fuel Calibration Number**	**1**
Test Fuel Type	46 - CARB LEV3 E10 Regular Gasoline	**Fuel Batch Calibration Date**	07/27/2017
Fuel Batch Calibration Effective Date	07/27/2017	**Fuel Batch Calibration Ineffective Date**	07/27/2032
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.749
Fuel Ethanol Volume Percent (%)	9.8	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17958
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	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Consolidated List of Standards

Exhaust Standards

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	--	--	--	--	--	--	0.18	99.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999
150,000 miles	PM	--	--	--	--	--	--	0	0.006

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	--	--	--	--	--	--	0.06	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0016	0.5

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-IV 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	--	--	--	--	--	--	0.18	1.0
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
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	--	--	--	--	--	--	0.247782	999
120,000 miles	METHANE	--	--	--	--	--	--	0.0019	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0024	0.010
150,000 miles	CO	--	--	--	--	--	--	0.18	1.0
150,000 miles	CO-COMP	--	--	--	--	--	--	0	4.2
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999
150,000 miles	PM	--	--	--	--	--	--	0	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-IV 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	--	--	--	--	--	--	0.18	9.6
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.036
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.006

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
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-IV 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	--	--	--	--	--	--	0.18	1.0
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999
150,000 miles	PM	--	--	--	--	--	--	0	0.001

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-IV SULEV30
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	--	--	--	--	--	--	--	1.0
4,000 miles	HCHO	--	--	--	--	--	--	--	0.008
4,000 miles	NMOG	--	--	1.1	--	--	--	--	99.999
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.060
4,000 miles	NOX	--	--	--	--	--	--	--	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**	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	--	--	--	--	--	--	0.18	99.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

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	--	--	--	--	--	--	0.247782	999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999

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-IV 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	--	--	1.03	--	--	--	0.0022	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0028	99.999

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-IV 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	--	--	--	--	--	--	0.06	12.5

Evaporative/Refueling Standards

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	Leak Test - Port Near Fuel Pipe		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.02	0

Evaporative/Refueling Family	VKMXR0151MPG	**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

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	California 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	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	Leak Test - Port Near Canister		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.02	0

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	California fuel 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	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	California 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	VKMXR0151MPG	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	CA 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	VKMXR0151MPG	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	Leak Test - Port Near Canister		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.020	0

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	Leak Test - Port Near Fuel Pipe		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.020	0

Evaporative/Refueling Family	VKMXR0151MPG	**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

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV 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

Evaporative/Refueling Family	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	California fuel 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	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV 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	VKMXR0151MPG	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	CA 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	VKMXT02.5MP3	Evaporative/Refueling Family	VKMXR0151MPG

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	AS-VOLT	Average System Voltage
CO	Carbon Monoxide	CO2 BAG 1	Bag 1 Carbon Dioxide
CO2	Carbon dioxide	CO2 BAG 2	Bag 2 Carbon Dioxide
CREE	Carbon-Related Exhaust Emissions	CO2 BAG 3	Bag 3 Carbon Dioxide
OPT-CREE	Optional Carbon-Related Exhaust Emissions	CO2 BAG 4	Bag 4 Carbon Dioxide
NOX	Nitrogen Oxide	NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides
PM	Particulate Matter	NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides
PM-COMP	SFTP Composite Particulate Matter	DT-IWRR	Drive Trace Inertia Work Ratio Rating
HC-NM	Non-methane Hydrocarbon	DT-ASCR	Drive Trace Absolute Speed Change Rating
OMHCE	Organic material Hydrocarbon Equivalent	DT-EER	Drive Trace Energy Economy Rating
OMNMHCE	Organic material non-methane HC equivalent	COMB-CREE	Combined Carbon-Related Exhaust Emissions
NMOG	Non-methane organic gases	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions
HCHO	Formaldehyde	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only
H3C2HO	Acetaldehyde	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	LEAK-DIA	Effective Leak Diameter (inches)
CO-COMP	SFTP Composite Carbon Monoxide	LEAK-GAS CAP	Gas Cap Leakage (cc/min)
ETHANOL	C2H5OH - Ethanol	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only
FE BAG 1	Bag 1 Fuel Economy	KW-HRS	Integrated DC KW-HRS
FE BAG 2	Bag 2 Fuel Economy	CH4 BAG 1	Bag 1 Methane
FE BAG 3	Bag 3 Fuel Economy	CH4 BAG 2	Bag 2 Methane
FE BAG 4	Bag 4 Fuel Economy	CH4 BAG 3	Bag 3 Methane
MFR FE	Manufacturer Fuel Economy	CH4 BAG 4	Bag 4 Methane
HC	Hydrocarbon for Running Loss and ORVR	CO BAG 1	Bag 1 Carbon Monoxide
METHANE	CH4 - Methane	CO BAG 2	Bag 2 Carbon Monoxide
METHANOL	CH3OH - Methanol	CO BAG 3	Bag 3 Carbon Monoxide
N2O	Nitrous Oxide	CO BAG 4	Bag 4 Carbon Monoxide
SPITBACK	Spitback Hydrocarbon in grams	NMOG BAG 1	Bag 1 Non-methane organic gases
AMP-HRS	Integrated Amp-hours	NMOG BAG 2	Bag 2 Non-methane organic gases
START-SOC	System Start State of Charge Watt-hours	NMOG BAG 3	Bag 3 Non-methane organic gases
END-SOC	System End State of Charge Watt-hours	NMOG BAG 4	Bag 4 Non-methane organic gases
ACT-DISTANCE	Actual Distance Driven (miles)		

Certification Region

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
CA	California + CAA Section 177 states	FA	Federal

Exhaust Emission Standard Level

B1	Federal Tier 2 Bin 1	T3B160	Federal Tier 3 Bin 160
B2	Federal Tier 2 Bin 2	T3B125	Federal Tier 3 Bin 125
B3	Federal Tier 2 Bin 3	T3B110	Federal Tier 3 Transitional Bin 110
B4	Federal Tier 2 Bin 4	T3B85	Federal Tier 3 Transitional Bin 85
B5	Federal Tier 2 Bin 5	T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover
B6	Federal Tier 2 Bin 6	T3B70	Federal Tier 3 Bin 70
B7	Federal Tier 2 Bin 7	T3B50	Federal Tier 3 Bin 50
B8	Federal Tier 2 Bin 8	T3B30	Federal Tier 3 Bin 30
B9	Federal Tier 2 Bin 9	T3B20	Federal Tier 3 Bin 20
B10	Federal Tier 2 Bin 10	T3B0	Federal Tier 3 Bin 0
B11	Federal Tier 2 Bin 11	HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)	HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)	HDV2B250	Federal Tier 3 HD Class 2b Bin 250
L2	California LEV-II LEV	HDV2B200	Federal Tier 3 HD Class 2b Bin 200
L2OP	California LEV-II LEV Optional	HDV2B170	Federal Tier 3 HD Class 2b Bin 170
U2	California LEV-II ULEV	HDV2B150	Federal Tier 3 HD Class 2b Bin 150
S2	California LEV-II SULEV	HDV2B0	Federal Tier 3 HD Class 2b Bin 0
ZEV	California ZEV	HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630
OT	Other	HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570
T1	Federal Tier 1	HDV3B400	Federal Tier 3 HD Class 3 Bin 400
PZEV	California PZEV	HDV3B270	Federal Tier 3 HD Class 3 Bin 270
L2LEV160	California LEV-II LEV160	HDV3B230	Federal Tier 3 HD Class 3 Bin 230
L2ULEV125	California LEV-II ULEV125	HDV3B200	Federal Tier 3 HD Class 3 Bin 200
L2SULEV30	California LEV-II SULEV30	HDV3B0	Federal Tier 3 HD Class 3 Bin 0
L2LEV395	California LEV-II LEV395	L4SULEV100	California LEV-IV SULEV100
L2ULEV340	California LEV-II ULEV340	L4SULEV125	California LEV-IV SULEV125
L2LEV630	California LEV-II LEV630	L4SULEV15	California LEV-IV SULEV15
L2ULEV570	California LEV-II ULEV570	L4SULEV150	California LEV-IV SULEV150
L3LEV160	California LEV-III LEV160	L4SULEV170	California LEV-IV SULEV170
L3ULEV125	California LEV-III ULEV125	L4SULEV175	California LEV-IV SULEV175
L3ULEV70	California LEV-III ULEV70	L4SULEV20	California LEV-IV SULEV20
L3ULEV50	California LEV-III ULEV50	L4SULEV200	California LEV-IV SULEV200
L3SULEV30	California LEV-III SULEV30	L4SULEV230	California LEV-IV SULEV230
L3SULEV20	California LEV-III SULEV20	L4SULEV25	California LEV-IV SULEV25
L3LEV395	California LEV-III LEV395	L4SULEV30	California LEV-IV SULEV30
L3ULEV340	California LEV-III ULEV340	L4SULEV75	California LEV-IV SULEV75
L3ULEV250	California LEV-III ULEV250	L4SULEV85	California LEV-IV SULEV85
L3ULEV200	California LEV-III ULEV200	L4ULEV125	California LEV-IV ULEV125

Certification Summary Information Report

Test Group	VKMXT02.5MP3	**Evaporative/Refueling Family**	VKMXR0151MPG
L3SULEV170	California LEV-III SULEV170	L4ULEV200	California LEV-IV ULEV200
L3SULEV150	California LEV-III SULEV150	L4ULEV250	California LEV-IV ULEV250
L3LEV630	California LEV-III LEV630	L4ULEV270	California LEV-IV ULEV270
L3ULEV570	California LEV-III ULEV570	L4ULEV40	California LEV-IV ULEV40
L3ULEV400	California LEV-III ULEV400	L4ULEV400	California LEV-IV ULEV400
L3ULEV270	California LEV-III ULEV270	L4ULEV50	California LEV-IV ULEV50
L3SULEV230	California LEV-III SULEV230	L4ULEV60	California LEV-IV ULEV60
L3SULEV200	California LEV-III SULEV200	L4ULEV70	California LEV-IV ULEV70

Transmission Type Code			
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual
A	Automatic	OT	Other
AM	Automated Manual	SA	Semi-Automatic
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)

Drive System Code			
4	4-Wheel Drive	P	Part-time 4-Wheel Drive
F	2-Wheel Drive, Front	A	All Wheel Drive
R	2-Wheel Drive, Rear		

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