

Certification Summary Information Report

Manufacturer	Ford Motor Company	Manufacturer Code	FMX
Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Certificate Number	TFMXT03.51F2-058	CARB Executive Order #	--
Certificate Issue Date	10/23/2025	Certificate Revision Date	--
Certificate Effective Date	10/23/2025	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	09/23/2025 12:18:59 PM
Model Year	2026		

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG						
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								
	<table border="1"> <tr> <th>Fuel</th><th>Basic Fuel Metering System</th><th>Lean Burn Strategy Indicator</th></tr> <tr> <td>Gasoline</td><td>Spark Ignition direct & ported injection</td><td>No</td></tr> </table>	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator	Gasoline	Spark Ignition direct & ported injection	No		
Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator							
Gasoline	Spark Ignition direct & ported injection	No							
Drive Source #2:	Electric Motor								
	<table border="1"> <tr> <th>Fuel</th><th>Basic Fuel Metering System</th><th>Lean Burn Strategy Indicator</th></tr> <tr> <td>Electricity</td><td>--</td><td>--</td></tr> </table>	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator	Electricity	--	--		
Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator							
Electricity	--	--							
Hybrid Indicator	Yes								
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	Yes						
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	No						
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4						
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	TFMXHHGVNE3A	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	02/02/2026	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	TFMXT02.02JF						
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	2						
OBD Deficiencies Comments	--								
Mfr Test Group Comments	City Litmus Value = 14.8, City Litmus Threshold Value = 14.5, Highway Litmus Value = 19.8, Highway Litmus Value = 18.6								
Mfr Exhaust / Evap Standards Comments	--								

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Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	08/28/2025 12:49:32 PM				
Integrated ORVR?	No	Fuel(s)	Electricity, Gasoline				
Multiple Fuel Storage	Fuels Stored Separately						
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	AIS HC Trap in Air Induction System				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	1 X 4.5L HA 3-port Rect.				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	295	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	0				
Mfr Evaporative/Refueling Family Comments	F150 FHEV 3.5L GTPFDI						
Leak Family Details							
Leak Family Indicator	Yes						
Canister Bleed Test Indicator	No	Applicability of Evaporative Canister Bleed Test	--				
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				
TFMXR0295LDG-001	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
Ford Motor Company	1 - Ford	132 - F150 PICKUP 4WD HEV	California + CAA Section 177 states	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	132 - F150 PICKUP 4WD HEV	Federal	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Engine Description							
Hybrid Type	IC Engine/Electric Motor			Hybrid Description	--		
Engine Type	4-Stroke Spark Ignition			Mfr Engine Description	Hybrid Electric w/4 stroke Atkinson, Gasoline Fueled, Turbocharged, Direct Injection, Sequential Fuel Injection, Catalyst Code E (Pt/Pd/Rh)		
Engine Block Arrangement	V-shaped engine			Mfr Engine Block Arrangement Description	--		
Camless Valvetrain Indicator	No			Oil Viscosity/Classification	5W-30 / ILSAC GF-7		
Number of Cylinders/Rotors	6			Mechanically Variable Compression Ratio Indicator	N		

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
3	Three-way catalyst	Palladium + Rhodium	Ceramic
4	Three-way catalyst	Platinum + Rhodium	Ceramic
5	Three-way catalyst	Palladium + Rhodium	Ceramic
6	Three-way catalyst	Platinum + Rhodium	Ceramic
7	Other	None	Ceramic
8	Other	None	Ceramic
Mfr After Treatment Device (ATD) Comments			
--			
Direct Ozone Reduction (DOR) Device			
Not Equipped			
Mfr Emission Control Device Comments			
--			
Engine Configuration Number 1			
Engine Displacement (liters)	3.5	Engine Rated Horsepower	430
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	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	TIVCT		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated air fuel	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated air fuel	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	Yes	Cooled Exhaust Gas Recirculation	Yes
EGR Type	Electronic/Electric	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		TFMXT03.51F2		Evaporative/Refueling Family		TFMXR0295LDG				
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	TFMX10091835	TFMX10091837	TFMX10091840	TFMX10091839	TFMX10091836	14.9	14.6	19.8	18.6	--
Electricity	--	--	--	--	--	--	--	--	--	--
SFTP LEV-III Official Test Numbers										
Test Group Fuel	FTP		US06		SC03					
Electricity	--		--		--					
Gasoline	TFMX10091835		TFMX10091837		TFMX10091840					
Official Charge Depleting Test Numbers										
Test Group Fuel	UDDS		Highway							
Gasoline	--		--							
Hybrid Electric Vehicle And Fuel Cell Information										
Rechargeable Energy Storage System	Battery(s)		Rechargeable Energy Storage System, if Other		--					
Battery Type	Lithium Ion		Number of Battery Packs		1					
Total Voltage of Battery Packs	281		Battery Energy Capacity		5					
Battery Specific Energy	36.8		Battery Charger Type		On-Board					
Number of Capacitors	--		Capacitor Rating (In Farads)		--					
Mfr Capacitor Comments	--									
Hydraulic System Description	--									
Regenerative Braking Type	Electrical Regen Brake									
Regenerative Braking Source	Both		Driver Controlled Regenerative Braking		No					
Mfr Regenerative Braking Description	--									
Drive Motor(s)/Generator(s)	1		Rated Motor/Generator Power		35					
Motor/Generator Type 1	DC Permanent Magnet, brushless		Usable H2 Fill Capacity (kg)		--					
Mfr Fuel Cell Description	--									
Fuel Cell On-Board H2 Storage Capacity (kg)	--									
Mfr Hybrid Electric/ Electric Vehicle Comments	--									

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
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Emission Data Vehicle Information

Vehicle ID / Configuration	MFD1-3.5-J-945 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	MFMXT03.51F1	Original Evaporative/Refueling Family	MFMXR0295LDG
Original Test Vehicle Model Year	2021		

Vehicle Model

Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 FHEV
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Leak Family Details

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

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

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	No		
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	MTFDCNNB00	Rated Horsepower	400
Displacement (liters)	3.5		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel
Charge Air Cooler Type	Air	Drive Mode While Testing	Part-time 4-Wheel Drive
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	5604	Equivalent Test Weight (pounds)	6000
GVWR (lbs)	7350	N/V Ratio	25.3
Axle Ratio	3.73		
Transmission Type	Semi-Automatic	# of Transmission Gears	10
Transmission Lockup	Yes	Creeper Gear	No

Certification Summary Information Report

Test Group	TFMXT03.51F2			Evaporative/Refueling Family			TFMXR0295LDG
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	55.69	0.2272	0.03972	9.53	-0.11697	0.03797	
Cold CO	55.69	0.2272	0.03972	9.53	-0.11697	0.03797	
US06	55.69	0.2272	0.03972	9.53	-0.11697	0.03797	N/A
Emission Control Device Comments	T3B70/ULEV70 SFTP-0.080 PM3 CB4 T3e/L3e						
Manufacturer Test Vehicle Comments	F150 3.5L FHEV AWD						

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	MFMX10063823	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	02/06/2020	Fuel	N/A
Fuel Batch ID	373-B	Fuel Calibration Number	49
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4804	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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)	527.31661	--
FE BAG 1 (Bag 1 Fuel Economy)	16.48995	16.48995
CO2 BAG 2 (Bag 2 Carbon Dioxide)	470.63506	--
FE BAG 2 (Bag 2 Fuel Economy)	18.46098	18.46098
METHANE (CH4 - Methane)	0.00495	--
CO (Carbon Monoxide)	0.34786	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.205247	--
DT-EER (Drive Trace Energy Economy Rating)	0.133732	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.224012	--
HCHO (Formaldehyde)	0.000182	--
MFR FE (Manufacturer Fuel Economy)	17.56144	17.56144
NOX (Nitrogen Oxide)	0.04493	--
N2O (Nitrous Oxide)	0.00166	--
HC-NM (Non-methane Hydrocarbon)	0.0128905	--
NMOG (Non-methane organic gases)	0.01414	--
PM (Particulate Matter)	0.0009	--
HC-TOTAL (Total Hydrocarbon)	0.0175	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	496	999
Optional Carbon-Related Exhaust Emissions	496	999

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
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	Test Result Name	Unrounded Test Result		Verify Calculated CO2
	Carbon dioxide	495.00813		--

Manufacturer Test Comments FTP & HWY FUL NMOG = 1.04 * NMHCr

Test #	MFMX10064216	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	MFMX10063823	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	03/05/2020	Fuel	Gasoline
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	5105	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	Yes

Test Results

	Test Result Name	Unrounded Test Result		Verify Calculated FE Equivalent Value (miles per gallon)
	OMHCE (Organic material Hydrocarbon Equivalent)	0.1644		--
	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.1644		--

Manufacturer Test Comments 2 Day EVAP THC x 1.08

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	0.1644	0.0028	0.167	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.1644	0.0028	0.167	0.5	Pass

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	MFMX10065306	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	MFMX10063823	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	05/29/2020	Fuel	Gasoline
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	5232	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

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
OMHCE (Organic material Hydrocarbon Equivalent)	0.215	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.215	--

Manufacturer Test Comments

Measured NMOG

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	0.215	0.0028	0.218	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.215	0.0028	0.218	0.5	Pass

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG									
Test #	MFMX10064215	Test Procedure	24 - Federal fuel refueling test (ORVR)									
Exhaust Test # for this Evap Test	MFMX10063823	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)									
Test Date	03/03/2020	Fuel	Gasoline									
Fuel Batch ID	--	Fuel Calibration Number	--									
Vehicle Class	N/A	DF Type	Mfr. Determined									
Verify Test Lab ID	APTL											
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)											
Test Start Odometer Reading	5160	Odometer Units	M									
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--									
State of Charge Delta	--											
Drive Cycle Speed Tolerance Criteria	Used Part 86 (+/- 2 mph, +/- 1 sec)	Road Speed Fan Usage	Yes									
Test Results												
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>OMHCE (Organic material Hydrocarbon Equivalent)</td> <td>0.00688</td> <td>--</td> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.00688</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	OMHCE (Organic material Hydrocarbon Equivalent)	0.00688	--	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00688	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.00688	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00688	--										
Manufacturer Test Comments												
ORVR TEST												
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail				
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.007	0.003	0.01	0.2	Pass				
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.007	0.003	0.01	0.2	Pass				

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	MFMX10065305	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	MFMX10063823	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	05/29/2020	Fuel	Gasoline
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	5243	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

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
OMHCE (Organic material Hydrocarbon Equivalent)	0	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

Manufacturer Test Comments

Measured NMOG

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-III Zero Evap (Option 2)	OMHCE	0	0	0	0.05	Pass

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG									
Emission Data Vehicle Information												
Vehicle ID / Configuration	TFD1-3.5-J-226 / 0	Manufacturer Vehicle Configuration Number	0									
Original Test Group Name	TFMXT03.51F2	Original Evaporative/Refueling Family	TFMXR0295LDG									
Original Test Vehicle Model Year	2026											
Vehicle Model												
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 HEV 4WD									
Leak Family Details												
Leak Family Identifier	001	Leak Family Name	TFMXR0295LDG-001									
Drive Sources and Fuel System Details												
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> </thead> <tbody> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> <tr> <td>2</td><td>Electric Motor</td><td>Electricity</td></tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	2	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel										
1	Combustion Engine	Gasoline										
2	Electric Motor	Electricity										
Hybrid Indicator	Yes											
Multiple Fuel Storage	--	Multiple Fuel Combustion	--									
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes									
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--									
Off-board charge Capable Indicator	No											
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03									
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles											
Odometer Correction Units	Miles											
Engine Code	TTFDCNNB00	Rated Horsepower	400									
Displacement (liters)	3.5											
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'										
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel									
Charge Air Cooler Type	Air	Drive Mode While Testing	Part-time 4-Wheel Drive									
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)									
Curb Weight (lbs)	5883	Equivalent Test Weight (pounds)	6000									
GVWR (lbs)	7400	N/V Ratio	25.7									
Axle Ratio	3.73											
Transmission Type	Semi-Automatic	# of Transmission Gears	10									
Transmission Lockup	Yes	Creeper Gear	No									

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family		TFMXR0295LDG	
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	37.28	0.58	0.03296	-4.04	0.5204	0.0283	19.8	
Cold CO	37.28	0.58	0.03296	-4.04	0.5204	0.0283	N/A	
US06	37.28	0.58	0.03296	-4.04	0.5204	0.0283	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		--						

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	TFMX10091835	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	07/25/2025	Fuel	Gasoline
Fuel Batch ID	373-B	Fuel Calibration Number	114
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3918	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	
CO2 BAG 1 (Bag 1 Carbon Dioxide)	504.027625	--	
CO BAG 1 (Bag 1 Carbon Monoxide)	0.8053	--	
FE BAG 1 (Bag 1 Fuel Economy)	17.313908	17.313908	
CH4 BAG 1 (Bag 1 Methane)	0.0115076	--	
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0387215	--	
CO2 BAG 2 (Bag 2 Carbon Dioxide)	474.503914	--	
CO BAG 2 (Bag 2 Carbon Monoxide)	0.02	--	
FE BAG 2 (Bag 2 Fuel Economy)	18.420776	18.420776	
CH4 BAG 2 (Bag 2 Methane)	0.0046505	--	
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	
CO2 BAG 3 (Bag 3 Carbon Dioxide)	444.277226	--	
CO BAG 3 (Bag 3 Carbon Monoxide)	0.0284	--	
FE BAG 3 (Bag 3 Fuel Economy)	19.706289	19.706289	
CH4 BAG 3 (Bag 3 Methane)	0.0030119	--	
NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	
CO2 BAG 4 (Bag 4 Carbon Dioxide)	456.727054	--	
CO BAG 4 (Bag 4 Carbon Monoxide)	0.0207	--	
FE BAG 4 (Bag 4 Fuel Economy)	19.146277	19.146277	
CH4 BAG 4 (Bag 4 Methane)	0.0038681	--	
NMOG BAG 4 (Bag 4 Non-methane organic gases)	0.0002262	--	
METHANE (CH4 - Methane)	0.00539	--	
CO (Carbon Monoxide)	0.185226	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.832745	--	
DT-EER (Drive Trace Energy Economy Rating)	0.821776	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.43428	--	
HCHO (Formaldehyde)	0.0003	--	
MFR FE (Manufacturer Fuel Economy)	18.7	18.7	
NOX (Nitrogen Oxide)	0.02096	--	
N2O (Nitrous Oxide)	0.0001	--	
HC-NM (Non-methane Hydrocarbon)	0.007341	--	
NMOG (Non-methane organic gases)	0.008089	--	
PM (Particulate Matter)	0	--	
HC-TOTAL (Total Hydrocarbon)	0.012344	--	

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
	Carbon-Related Exhaust Emissions	467	467
	Optional Carbon-Related Exhaust Emissions	467	467
	Test Result Name	Unrounded Test Result	Verify Calculated CO2
	Carbon dioxide	467.1	--
Manufacturer Test Comments	--		

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family					TFMXR0295LDG		
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 50	CO	0.19	--	--	--	--	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.1	--	--	--	--	--	0.1	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	467	--	--	--	0	--	467	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	HCHO	0.0003	--	--	--	--	--	0	0.004	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0054	--	--	--	--	--	0.005	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0001	--	--	--	--	--	0	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0081	--	1.1	--	--	--	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0291	--	--	--	--	--	0.029	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0193	--	--	--	--	--	0.019	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.021	--	--	--	--	--	0.021	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	OPT-CREE	467	--	--	--	0	--	467	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0	--	--	--	--	--	0	0.003	Pass
CA	150,000 miles	California LEV-III ULEV50	CO	0.19	--	--	--	--	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-III ULEV50	CO-COMP	0.1	--	--	--	--	--	0.1	4.2	Pass
CA	150,000 miles	California LEV-III ULEV50	HCHO	0.0003	--	--	--	--	--	0	0.004	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0081	--	1.1	--	--	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0291	--	--	--	--	--	0.029	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX-COMP	0.0193	--	--	--	--	--	0.019	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.021	--	--	--	--	--	0.021	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	PM	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	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	TFMX10091838	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	07/09/2025	Fuel	Gasoline
Fuel Batch ID	373-B	Fuel Calibration Number	114
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3811	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG																																																																																	
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>572.598648</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.6269</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>15.237688</td><td>15.237688</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0145169</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0873357</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>484.379504</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0305</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>18.077947</td><td>18.077947</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.002868</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>466.360913</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0386</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>18.7755</td><td>18.7755</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0024362</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.005163</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.15627</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.071661</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.199728</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.411939</td><td>--</td></tr><tr><td>HCHO (Formaldehyde)</td><td>0.0007</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>17.6</td><td>17.6</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.010509</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.016418</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.018091</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.021123</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	572.598648	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.6269	--	FE BAG 1 (Bag 1 Fuel Economy)	15.237688	15.237688	CH4 BAG 1 (Bag 1 Methane)	0.0145169	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0873357	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	484.379504	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0305	--	FE BAG 2 (Bag 2 Fuel Economy)	18.077947	18.077947	CH4 BAG 2 (Bag 2 Methane)	0.002868	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	466.360913	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0386	--	FE BAG 3 (Bag 3 Fuel Economy)	18.7755	18.7755	CH4 BAG 3 (Bag 3 Methane)	0.0024362	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	METHANE (CH4 - Methane)	0.005163	--	CO (Carbon Monoxide)	0.15627	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.071661	--	DT-EER (Drive Trace Energy Economy Rating)	-0.199728	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.411939	--	HCHO (Formaldehyde)	0.0007	--	MFR FE (Manufacturer Fuel Economy)	17.6	17.6	NOX (Nitrogen Oxide)	0.010509	--	HC-NM (Non-methane Hydrocarbon)	0.016418	--	NMOG (Non-methane organic gases)	0.018091	--	HC-TOTAL (Total Hydrocarbon)	0.021123	--		
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		<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CREE/OPT-CREE</th></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>498</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	498	--																																																																												
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Certification Summary Information Report

Test Group		TFMXT03.51F2				Evaporative/Refueling Family				TFMXR0295LDG		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	4,000 miles	California LEV-III ULEV50	CO	0.16	--	--	--	--	--	0.2	1.7	Pass
CA	4,000 miles	California LEV-III ULEV50	HCHO	0.0007	--	--	--	--	--	0.001	0.016	Pass
CA	4,000 miles	California LEV-III ULEV50	NMOG	0.0181	--	--	--	--	--	0.018	999.999	Pass
CA	4,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0286	--	--	--	--	--	0.029	0.100	Pass
CA	4,000 miles	California LEV-III ULEV50	NOX	0.0105	--	--	--	--	--	0.01	999.999	Pass

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	TFMX10091839	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	08/01/2025	Fuel	Gasoline
Fuel Batch ID	375-B	Fuel Calibration Number	71
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3999	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG																																																																													
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>724.085153</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>1.7277</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>11.938046</td><td>11.938046</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0367942</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.4065437</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>538.252626</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0285</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>16.15154</td><td>16.15154</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0032836</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>521.893546</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0446</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>16.646033</td><td>16.646033</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0030379</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.010159</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.38497</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.448696</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.528935</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.897411</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>15.2</td><td>15.2</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.033032</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.076652</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.08423</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.08727</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	724.085153	--	CO BAG 1 (Bag 1 Carbon Monoxide)	1.7277	--	FE BAG 1 (Bag 1 Fuel Economy)	11.938046	11.938046	CH4 BAG 1 (Bag 1 Methane)	0.0367942	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.4065437	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	538.252626	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0285	--	FE BAG 2 (Bag 2 Fuel Economy)	16.15154	16.15154	CH4 BAG 2 (Bag 2 Methane)	0.0032836	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	521.893546	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0446	--	FE BAG 3 (Bag 3 Fuel Economy)	16.646033	16.646033	CH4 BAG 3 (Bag 3 Methane)	0.0030379	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	METHANE (CH4 - Methane)	0.010159	--	CO (Carbon Monoxide)	0.38497	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.448696	--	DT-EER (Drive Trace Energy Economy Rating)	0.528935	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.897411	--	MFR FE (Manufacturer Fuel Economy)	15.2	15.2	NOX (Nitrogen Oxide)	0.033032	--	HC-NM (Non-methane Hydrocarbon)	0.076652	--	NMOG (Non-methane organic gases)	0.08423	--	HC-TOTAL (Total Hydrocarbon)	0.08727	--	
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	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CREE/OPT-CREE</th></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>573</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	573	--																																																																									
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	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CO2</th></tr><tr><td>Carbon dioxide</td><td>572.3</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	572.3	--																																																																									
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Carbon dioxide	572.3	--																																																																														
Manufacturer Test Comments	--																																																																															

Certification Summary Information Report

Test Group		TFMXT03.51F2				Evaporative/Refueling Family				TFMXR0295LDG		
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 50	CO	0.38	--	--	--	--	--	0.4	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 50	HC-NM	0.08	--	--	--	--	--	0.1	0.4	Pass
CA	50,000 miles	California LEV-III ULEV50	CO	0.38	--	--	--	--	--	0.4	12.5	Pass

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	TFMX10091836	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	07/25/2025	Fuel	Gasoline
Fuel Batch ID	373-B	Fuel Calibration Number	114
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3918	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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)	0.000717	--	
CO (Carbon Monoxide)	0.024835	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.36164	--	
DT-EER (Drive Trace Energy Economy Rating)	0.374948	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.3249	--	
HCHO (Formaldehyde)	0	--	
MFR FE (Manufacturer Fuel Economy)	27	27	
NOX (Nitrogen Oxide)	0.00505	--	
N2O (Nitrous Oxide)	0	--	
HC-NM (Non-methane Hydrocarbon)	0.000333	--	
NMOG (Non-methane organic gases)	0.000343	--	
HC-TOTAL (Total Hydrocarbon)	0.001015	--	
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions	324	324	
Test Result Name	Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide	324.3	--	
Manufacturer Test Comments	--		

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family					TFMXR0295LDG		
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 50	CREE	324	--	--	--	0	--	324	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0003	--	1.03	--	--	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0053	--	--	--	--	--	0.005	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.005	--	--	--	--	--	0.005	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0003	--	1.03	--	--	--	0	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0053	--	--	--	--	--	0.005	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.005	--	--	--	--	--	0.005	999.999	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	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Test #	TFMX10091837	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	07/25/2025	Fuel	Gasoline
Fuel Batch ID	373-B	Fuel Calibration Number	114
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3954	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
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				TFMXT03.51F2				Evaporative/Refueling Family				TFMXR0295LDG					
				Test Result Name		Unrounded Test Result		Verify Calculated FE Equivalent Value (miles per gallon)									
				CO2 BAG 1 (Bag 1 Carbon Dioxide)		714.15669		--									
				CO BAG 1 (Bag 1 Carbon Monoxide)		0.0677		--									
				FE BAG 1 (Bag 1 Fuel Economy)		12.253749		12.253749									
				CH4 BAG 1 (Bag 1 Methane)		0.0019699		--									
				NMOG BAG 1 (Bag 1 Non-methane organic gases)		0.0023325		--									
				CO2 BAG 2 (Bag 2 Carbon Dioxide)		408.436296		--									
				CO BAG 2 (Bag 2 Carbon Monoxide)		0.1071		--									
				FE BAG 2 (Bag 2 Fuel Economy)		21.438112		21.438112									
				CH4 BAG 2 (Bag 2 Methane)		0.0014589		--									
				NMOG BAG 2 (Bag 2 Non-methane organic gases)		0.0020697		--									
				METHANE (CH4 - Methane)		0.001572		--									
				CO (Carbon Monoxide)		0.098311		--									
				DT-ASCR (Drive Trace Absolute Speed Change Rating)		-0.178243		--									
				DT-EER (Drive Trace Energy Economy Rating)		-0.16023		--									
				DT-IWRR (Drive Trace Inertia Work Ratio Rating)		0.023049		--									
				MFR FE (Manufacturer Fuel Economy)		18.4		18.4									
				NOX (Nitrogen Oxide)		0.009619		--									
				HC-NM (Non-methane Hydrocarbon)		0.002066		--									
				NMOG (Non-methane organic gases)		0.002128		--									
				PM (Particulate Matter)		0.000498		--									
				HC-TOTAL (Total Hydrocarbon)		0.00356		--									
								Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE					
								Carbon-Related Exhaust Emissions		476		--					
								Test Result Name		Unrounded Test Result		Verify Calculated CO2					
Carbon dioxide		476.3						--									
Manufacturer Test Comments				--													
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 50	PM	0.0005	--	--	--	--	--	0	0.006	Pass				
CA		150,000 miles	California LEV-III ULEV50	PM	0.0005	--	--	--	--	--	0	0.006	Pass				

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG																																	
Test #	TFMX10091840	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	07/30/2025	Fuel	N/A																																	
Fuel Batch ID	373-B	Fuel Calibration Number	115																																	
Vehicle Class	N/A	DF Type	Mfr. Determined																																	
Verify Test Lab ID	APTL																																			
E10 Evaporative Test Measurement Method	--																																			
Test Start Odometer Reading	3985	Odometer Units	M																																	
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--																																	
State of Charge Delta	Yes																																			
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																	
Test Results																																				
<table border="1"> <thead> <tr> <th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr> </thead> <tbody> <tr> <td>METHANE (CH4 - Methane)</td><td>0.003841</td><td>--</td></tr> <tr> <td>CO (Carbon Monoxide)</td><td>0.020305</td><td>--</td></tr> <tr> <td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.215572</td><td>--</td></tr> <tr> <td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.233093</td><td>--</td></tr> <tr> <td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>-0.485513</td><td>--</td></tr> <tr> <td>MFR FE (Manufacturer Fuel Economy)</td><td>16.4</td><td>16.4</td></tr> <tr> <td>NOX (Nitrogen Oxide)</td><td>0.015868</td><td>--</td></tr> <tr> <td>HC-NM (Non-methane Hydrocarbon)</td><td>0</td><td>--</td></tr> <tr> <td>NMOG (Non-methane organic gases)</td><td>0</td><td>--</td></tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td><td>0.001486</td><td>--</td></tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	METHANE (CH4 - Methane)	0.003841	--	CO (Carbon Monoxide)	0.020305	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.215572	--	DT-EER (Drive Trace Energy Economy Rating)	0.233093	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.485513	--	MFR FE (Manufacturer Fuel Economy)	16.4	16.4	NOX (Nitrogen Oxide)	0.015868	--	HC-NM (Non-methane Hydrocarbon)	0	--	NMOG (Non-methane organic gases)	0	--	HC-TOTAL (Total Hydrocarbon)	0.001486	--
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Manufacturer Test Comments	--																																			

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
Fuel Properties			
Fuel Batch ID	373-B	Fuel Calibration Number	114
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/09/2025
Fuel Batch Calibration Effective Date	07/09/2025	Fuel Batch Calibration Ineffective Date	12/31/2100
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17855
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.357	Fuel Carbon Mass Fraction (E10)	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.831	Weight Fraction CO2	--
Fuel Batch ID	373-B	Fuel Calibration Number	115
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/29/2025
Fuel Batch Calibration Effective Date	07/29/2025	Fuel Batch Calibration Ineffective Date	12/31/2100
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.752
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17855
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.307	Fuel Carbon Mass Fraction (E10)	0.828
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--
Fuel Batch ID	373-B	Fuel Calibration Number	49
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	01/30/2020
Fuel Batch Calibration Effective Date	01/30/2020	Fuel Batch Calibration Ineffective Date	12/31/2100
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17945
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--
Fuel Batch ID	375-B	Fuel Calibration Number	71
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	07/29/2025
Fuel Batch Calibration Effective Date	07/29/2025	Fuel Batch Calibration Ineffective Date	12/31/2100

Certification Summary Information Report

Test Group	TFMXT03.51F2	Evaporative/Refueling Family	TFMXR0295LDG
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)	17876
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.307	Fuel Carbon Mass Fraction (E10)	0.83
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family		TFMXR0295LDG		
Consolidated List of Standards									
Exhaust Standards									
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level		California LEV-III ULEV50		
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	--	--	--	--	--	--	--	1.7
4,000 miles	HCHO	--	--	--	--	--	--	--	0.016
4,000 miles	NMOG	--	--	--	--	--	--	--	999.999
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.100
4,000 miles	NOX	--	--	--	--	--	--	--	999.999
Cert Region		Federal			Cert/In-Use Code		Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level		Federal Tier 3 Bin 50		
Fuel		Gasoline			Test Procedure		HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level		California LEV-III ULEV50		
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	PM	--	--	--	--	--	--	--	0.006

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family			TFMXR0295LDG	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
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	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
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	--	--	--	--	--	--	--	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	PM	--	--	--	--	--	--	--	0.001

Certification Summary Information Report

Test Group		TFMXT03.51F2			Evaporative/Refueling Family			TFMXR0295LDG	
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
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	--	--	--	--	--	--	--	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	METHANE	--	--	--	--	--	--	--	0.030
150,000 miles	N2O	--	--	--	--	--	--	--	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	--	0.003
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
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	--	--	--	--	--	--	--	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	--	0.4
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
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	PM	--	--	--	--	--	--	--	0.006

Certification Summary Information Report

Test Group	TFMXT03.51F2		Evaporative/Refueling Family		TFMXR0295LDG				
Cert Region	California + CAA Section 177 states		Cert/In-Use Code		Both				
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)		Standard Level		California LEV-III ULEV50				
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	--	--	--	--	--	--	--	12.5
Evaporative/Refueling Standards									
Evaporative/Refueling Family	TFMXR0295LDG		Cert Region		California + CAA Section 177 states				
Cert/In-Use Code	Both		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	OMHCE	--		0.05		0		
Evaporative/Refueling Family	TFMXR0295LDG		Cert Region		Federal				
Cert/In-Use Code	Both		Standard Level		Federal Tier 3 Evap				
Test Procedure	2-day evap								
Fuel	Useful Life	Emission Name	Rounded Result		Std		Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--		0.500		0.0028		
Evaporative/Refueling Family	TFMXR0295LDG		Cert Region		California + CAA Section 177 states				
Cert/In-Use Code	Both		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	OMHCE	--		0.20		0.003		
Evaporative/Refueling Family	TFMXR0295LDG		Cert Region		California + CAA Section 177 states				
Cert/In-Use Code	Both		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	OMHCE	--		0.500		0.0028		

Certification Summary Information Report

Test Group		TFMXT03.51F2		Evaporative/Refueling Family		TFMXR0295LDG	
Evaporative/Refueling Family		TFMXR0295LDG		Cert Region		Federal	
Cert/In-Use Code		Both		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		
Evaporative/Refueling Family		TFMXR0295LDG		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		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	OMHCE	--	0.500	0.0028		
Evaporative/Refueling Family		TFMXR0295LDG		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0028		
Evaporative/Refueling Family		TFMXR0295LDG		Cert Region		Federal	
Cert/In-Use Code		Both		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	0.003		

Certification Summary Information Report

Test Group		TFMXT03.51F2	Evaporative/Refueling Family		TFMXR0295LDG
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		TFMXT03.51F2	Evaporative/Refueling Family		TFMXR0295LDG
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		TFMXT03.51F2	Evaporative/Refueling Family		TFMXR0295LDG
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		