

Certification Summary Information Report

Manufacturer	Ford Motor Company	Manufacturer Code	FMX
Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Certificate Number	TFMXT03.54JK-065	CARB Executive Order #	--
Certificate Issue Date	10/30/2025	Certificate Revision Date	--
Certificate Effective Date	10/30/2025	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	10/02/2025 01:15:50 AM
Model Year	2026		

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	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	TFMXGPGNNE1B	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	Yes		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	TFMXT02.02Y5
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	2
OBD Deficiencies Comments	OBD Deficiencies: Catalyst Reheating Strategy Monitoring, Communication Failure Between BCM and PCM		
Mfr Test Group Comments	City Litmus Value = 12.7, City Litmus Threshold Value = 12.5, Highway Litmus Value = 15.1, Highway Litmus Threshold Value = 15.2		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	Update for Correction	Submission/Correction Date	10/02/2025 01:10:19 AM				
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	See Comments				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	See comments below				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	260	Number of Primary Canisters	1				
Number of Bleed Canisters	2	Bleed Canister Total Working Capacity (grams)	1				
Mfr Evaporative/Refueling Family Comments	1 X 3.7L HA 3-port Rect. + 1 X 0.048L Bleed + 1 X 0.072L Bleed						
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				
TFMXR0260NDG-001	50 State	0.02	TFMXR0260NDG-001				
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	122 - F150 RAPTOR 4WD	Federal	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	122 - F150 RAPTOR 4WD	California + CAA Section 177 states	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	SAE 5W-30 API SP ILSACGF7				
Number of Cylinders/Rotors	6	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
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	Platinum+Palladium+Rhodium	Ceramic
3	Three-way catalyst	Palladium + Rhodium	Ceramic
4	Three-way catalyst	Platinum+Palladium+Rhodium	Ceramic
Mfr After Treatment Device (ATD) Comments			
2TWC(2)			
Direct Ozone Reduction (DOR) Device			
Not Equipped			
Mfr Emission Control Device Comments			
--			
Engine Configuration Number 1			
Engine Displacement (liters)	3.5	Engine Rated Horsepower	450
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	Ti-VCT		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated 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	F150 Raptor (98 RON Ratings)		

Certification Summary Information Report

Test Group		TFMXT03.54JK				Evaporative/Refueling Family			TFMXR0260NDG		
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		TFMX91006584	TFMX91006583	TFMX10091913	TFMX10091910	TFMX91006582	36.9	12.7	64	15.3	--
SFTP LEV-III Official Test Numbers											
Test Group Fuel		FTP		US06		SC03					
Gasoline		TFMX91006584		TFMX91006583		TFMX10091913					

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG						
Emission Data Vehicle Information									
Vehicle ID / Configuration	JFC1-2.7-J-027 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	JFMXT02.73JK	Original Evaporative/Refueling Family	JFMXR0260NDG						
Original Test Vehicle Model Year	2018								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F-150						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	JFMXR0260NDG-001						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	JTFCWQNC05	Rated Horsepower	325						
Displacement (liters)	2.7								
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	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4903	Equivalent Test Weight (pounds)	5250						
GVWR (lbs)	7000	N/V Ratio	25.7						
Axle Ratio	3.73								
Transmission Type	Semi-Automatic	# of Transmission Gears	10						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		TFMXT03.54JK			Evaporative/Refueling Family		TFMXR0260NDG	
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	41.96	0.2104	0.03763	22.56	-0.1624	0.03888	19.5	
Cold CO	41.96	0.2104	0.03763	22.56	-0.1624	0.03888	N/A	
US06	41.96	0.2104	0.03763	22.56	-0.1624	0.03888	N/A	
Emission Control Device Comments		T18-0011/12/13-01 T3B70 L3B70						
Manufacturer Test Vehicle Comments		2.7L GTPFDI F-150 4X4 SUPER CAB-MAX						

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Test #	JFMX10047760	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	03/29/2017	Fuel	N/A
Fuel Batch ID	373-B	Fuel Calibration Number	13
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5070	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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	482.0090933	--
FE BAG 1 (Bag 1 Fuel Economy)	17.9200644	17.9200644
CO2 BAG 2 (Bag 2 Carbon Dioxide)	440.7401646	--
FE BAG 2 (Bag 2 Fuel Economy)	19.6654841	19.6654841
CO2 BAG 3 (Bag 3 Carbon Dioxide)	407.5538852	--
FE BAG 3 (Bag 3 Fuel Economy)	21.1635122	21.1635122
METHANE (CH4 - Methane)	0.0115753	--
CO (Carbon Monoxide)	0.893448	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.341896	--
DT-EER (Drive Trace Energy Economy Rating)	-0.819038	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.0835978	--
HCHO (Formaldehyde)	0.000553	--
MFR FE (Manufacturer Fuel Economy)	19.6704518	19.6704518
NOX (Nitrogen Oxide)	0.0076322	--
N2O (Nitrous Oxide)	0.0012778	--
HC-NM (Non-methane Hydrocarbon)	0.0201275	--
NMOG (Non-methane organic gases)	0.0221425	--
PM (Particulate Matter)	0.001982	--
HC-TOTAL (Total Hydrocarbon)	0.0307481	--

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	441	999
Optional Carbon-Related Exhaust Emissions	442	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	440.1867686	--

Manufacturer Test Comments J027 City/Hwy NMOG = 1.1 * NMHCr

Test #	JFMX10047783	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	JFMX10047760	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	03/10/2017	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	4936	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)	0.2537	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2537	--

Manufacturer Test Comments J027 3-Day SHED 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	0.2537	0	0.254	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.2537	0	0.254	0.5	Pass

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG									
Test #	JFMX10047784	Test Procedure	23 - 2-day evap									
Exhaust Test # for this Evap Test	JFMX10047760	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)									
Test Date	02/10/2017	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	4761	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												
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Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.2084	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2084	--										
Manufacturer Test Comments												
J027 2-Day SHED												
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	0.2084	0	0.208	0.5	Pass				
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.2084	0	0.208	0.5	Pass				

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG									
Test #	JFMX10047785	Test Procedure	32 - Federal Fuel Running Loss									
Exhaust Test # for this Evap Test	JFMX10047760	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)									
Test Date	03/10/2017	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	4947	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												
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Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.0001	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0001	--										
Manufacturer Test Comments --												
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				

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG						
Emission Data Vehicle Information									
Vehicle ID / Configuration	JKC00022 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	KFMXT02.73JK	Original Evaporative/Refueling Family	KFMXR0260NDX						
Original Test Vehicle Model Year	2019								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F-150 4X4 SUPER CREW CAB						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	KFMXR0260NDX-001						
Drive Sources and Fuel System Details									
	<table><tr><th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr><tr><td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr></table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	JTFCWQNB24	Rated Horsepower	400						
Displacement (liters)	2.7								
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	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4925	Equivalent Test Weight (pounds)	5250						
GVWR (lbs)	6600	N/V Ratio	24.5						
Axle Ratio	3.55								
Transmission Type	Semi-Automatic	# of Transmission Gears	10						
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	24.33	0.2027	0.03614	8.79	0.10953	0.03486	16.6		
Emission Control Device Comments	BETP Test Submission								

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Manufacturer Test Vehicle Comments	2.7L GTPFDI F-150 4X4 SUPER CAB		
Test #	KFMX10057896	Test Procedure	65 - Evap Canister Bleed Test
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	02/08/2019	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	5120	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
HC-TOTAL (Total Hydrocarbon)	0.0048	--

Manufacturer Test Comments Official BETP test for new canister

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	0.0048	0	0.005	0.02	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0048	0	0.005	0.02	Pass

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG						
Emission Data Vehicle Information									
Vehicle ID / Configuration	MFD1-3.5-J-267 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	MFMXT03.54JM	Original Evaporative/Refueling Family	MFMXR0260NDG						
Original Test Vehicle Model Year	2021								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 Raptor						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	MFMXR0260NDG-001						
Drive Sources and Fuel System Details									
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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	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	MTFDBMNB02	Rated Horsepower	450						
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	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)						
Curb Weight (lbs)	5700	Equivalent Test Weight (pounds)	6000						
GVWR (lbs)	7150	N/V Ratio	26.4						
Axle Ratio	4.1								
Transmission Type	Semi-Automatic	# of Transmission Gears	10						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		TFMXT03.54JK		Evaporative/Refueling Family		TFMXR0260NDG		
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	46.19	0.31	0.04721	18.65	0.3106	0.04395	24	
Cold CO	46.19	0.31	0.04721	18.65	0.3106	0.04395	N/A	
US06	46.19	0.31	0.04721	18.65	0.3106	0.04395	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		F150 3.5L RWD						
Test #	MFMX10068178			Test Procedure		24 - Federal fuel refueling test (ORVR)		
Exhaust Test # for this Evap Test	JFMX10047760			Test Fuel Type		48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)		
Test Date	01/15/2021			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	4024			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								
Test Result Name		Unrounded Test Result		Verify Calculated FE Equivalent Value (miles per gallon)				
OMHCE (Organic material Hydrocarbon Equivalent)		0.02		--				
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)		0.02		--				
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	0.02	0.003	0.02	0.2	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.02	0.003	0.02	0.2	Pass

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG						
Emission Data Vehicle Information									
Vehicle ID / Configuration	TFD1-3.5-J-384 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	TFMXT03.54JK	Original Evaporative/Refueling Family	TFMXR0260NDG						
Original Test Vehicle Model Year	2026								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 RAPTOR 4WD						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	TFMXR0260NDG-001						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	TTFDBMNS00	Rated Horsepower	450						
Displacement (liters)	3.5								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	3	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)						
Curb Weight (lbs)	6022	Equivalent Test Weight (pounds)	6500						
GVWR (lbs)	7400	N/V Ratio	24.6						
Axle Ratio	4.1								
Transmission Type	Automatic	# of Transmission Gears	10						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		TFMXT03.54JK			Evaporative/Refueling Family		TFMXR0260NDG	
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	45.56	0.4419	0.04492	15.15	0.3879	0.04229	24	
Cold CO	45.56	0.4419	0.04492	15.15	0.3879	0.04229	N/A	
US06	45.56	0.4419	0.04492	15.15	0.3879	0.04229	N/A	
Emission Control Device Comments		T3B50, interim LEV4 ULEV50, SFTP-0.040 PM3, CB4, T3e, L4e						
Manufacturer Test Vehicle Comments		26MY F150 RAPTOR 4WD 3.5L GTPFDI (Green States)						

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Test #	TFMX10091910	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	07/24/2025	Fuel	Gasoline
Fuel Batch ID	375-B	Fuel Calibration Number	70
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	4216	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	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG																																																																														
	<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>728.664324</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>1.5328</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>11.859481</td><td>11.859481</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0439155</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.3080902</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>595.988113</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.072</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>14.570366</td><td>14.570366</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0020813</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.0013838</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>540.416834</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0749</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>16.080851</td><td>16.080851</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0038399</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0.001682</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.011239</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.38</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>-0.457331</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.590961</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>-0.224049</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>14.3</td><td>14.3</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.023742</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.06</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.065063</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.069908</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)	728.664324	--	CO BAG 1 (Bag 1 Carbon Monoxide)	1.5328	--	FE BAG 1 (Bag 1 Fuel Economy)	11.859481	11.859481	CH4 BAG 1 (Bag 1 Methane)	0.0439155	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.3080902	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	595.988113	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.072	--	FE BAG 2 (Bag 2 Fuel Economy)	14.570366	14.570366	CH4 BAG 2 (Bag 2 Methane)	0.0020813	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0013838	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	540.416834	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0749	--	FE BAG 3 (Bag 3 Fuel Economy)	16.080851	16.080851	CH4 BAG 3 (Bag 3 Methane)	0.0038399	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.001682	--	METHANE (CH4 - Methane)	0.011239	--	CO (Carbon Monoxide)	0.38	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.457331	--	DT-EER (Drive Trace Energy Economy Rating)	-0.590961	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.224049	--	MFR FE (Manufacturer Fuel Economy)	14.3	14.3	NOX (Nitrogen Oxide)	0.023742	--	HC-NM (Non-methane Hydrocarbon)	0.06	--	NMOG (Non-methane organic gases)	0.065063	--	HC-TOTAL (Total Hydrocarbon)	0.069908	--		
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Manufacturer Test Comments	Drive Mode - Sport Mode with StartStop Active																																																																																

Certification Summary Information Report

Test Group		TFMXT03.54JK				Evaporative/Refueling Family				TFMXR0260NDG		
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	0.06	--	--	--	--	--	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	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Test #	TFMX91006584	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	08/28/2025	Fuel	Gasoline
Fuel Batch ID	43732	Fuel Calibration Number	2
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4300	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	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG																																																																																			
	<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>593.8966064</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.7708981</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>999</td><td>--</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0098952</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0370856</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>530.8432617</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>999</td><td>--</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0024922</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.0001731</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>526.4765015</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>999</td><td>--</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0039672</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0.0005</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0044325</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.1598143</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>-0.4073646</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.1816693</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>-0.168331</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>999</td><td>--</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0156158</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0013314</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0071988</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0079054</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0019575</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0115309</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)	593.8966064	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.7708981	--	FE BAG 1 (Bag 1 Fuel Economy)	999	--	CH4 BAG 1 (Bag 1 Methane)	0.0098952	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0370856	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	530.8432617	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0	--	FE BAG 2 (Bag 2 Fuel Economy)	999	--	CH4 BAG 2 (Bag 2 Methane)	0.0024922	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0001731	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	526.4765015	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0	--	FE BAG 3 (Bag 3 Fuel Economy)	999	--	CH4 BAG 3 (Bag 3 Methane)	0.0039672	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0005	--	METHANE (CH4 - Methane)	0.0044325	--	CO (Carbon Monoxide)	0.1598143	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.4073646	--	DT-EER (Drive Trace Energy Economy Rating)	-0.1816693	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.168331	--	MFR FE (Manufacturer Fuel Economy)	999	--	NOX (Nitrogen Oxide)	0.0156158	--	N2O (Nitrous Oxide)	0.0013314	--	HC-NM (Non-methane Hydrocarbon)	0.0071988	--	NMOG (Non-methane organic gases)	0.0079054	--	PM (Particulate Matter)	0.0019575	--	HC-TOTAL (Total Hydrocarbon)	0.0115309	--	
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Manufacturer Test Comments	None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, FE BAG 3, MFR FE																																																																																					

Manufacturer Test Comments

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

Certification Summary Information Report

Test Group		TFMXT03.54JK			Evaporative/Refueling Family					TFMXR0260NDG		
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	0.16	--	--	--	0	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.17	--	--	--	0	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	543	--	--	--	0	--	543	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0044	--	--	--	0	--	0.004	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0013	--	--	--	0	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0079	--	1.1	--	0	--	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0235	--	--	--	--	--	0.024	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0188	--	--	--	0	--	0.019	0.060	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0156	--	--	--	0	--	0.016	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.002	--	--	--	0	--	0.002	0.003	Pass
CA	150,000 miles	California LEV-III ULEV50	CO	0.16	--	--	--	--	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-III ULEV50	CO-COMP	0.17	--	--	--	--	--	0.2	4.2	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0079	--	1.1	--	--	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0235	--	--	--	--	--	0.024	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX-COMP	0.0188	--	--	--	--	--	0.019	0.060	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0156	--	--	--	--	--	0.016	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	PM	0.002	--	--	--	--	--	0.002	0.003	Pass

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

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG																																				
Test #	TFMX91006582	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	08/28/2025	Fuel	Gasoline																																				
Fuel Batch ID	43732	Fuel Calibration Number	2																																				
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	--																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	4311	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																																							
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Test Result Name	Unrounded Test Result	Verify Calculated CO2																																					
Carbon dioxide	399.9659424	--																																					
Manufacturer Test Comments	None																																						

Certification Summary Information Report

Test Group		TFMXT03.54JK				Evaporative/Refueling Family				TFMXR0260NDG		
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	400	--	--	--	0	--	400	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0002	--	1.03	--	--	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0025	--	--	--	--	--	0.002	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0023	--	--	--	0	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0002	--	1.03	--	--	--	0	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0025	--	--	--	--	--	0.002	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0023	--	--	--	--	--	0.002	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	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Test #	TFMX91006583	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	08/28/2025	Fuel	Gasoline
Fuel Batch ID	43732	Fuel Calibration Number	2
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4335	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	TFMXT03.54JK				Evaporative/Refueling Family				TFMXR0260NDG				
	Test Result Name		Unrounded Test Result				Verify Calculated FE Equivalent Value (miles per gallon)						
	CO2 BAG 1 (Bag 1 Carbon Dioxide)		911.6289062				--						
	CO BAG 1 (Bag 1 Carbon Monoxide)		0.2883847				--						
	FE BAG 1 (Bag 1 Fuel Economy)		999				--						
	CH4 BAG 1 (Bag 1 Methane)		0.0097825				--						
	NMOG BAG 1 (Bag 1 Non-methane organic gases)		0.015381				--						
	CO2 BAG 2 (Bag 2 Carbon Dioxide)		535.7435303				--						
	CO BAG 2 (Bag 2 Carbon Monoxide)		0.2979301				--						
	FE BAG 2 (Bag 2 Fuel Economy)		999				--						
	CH4 BAG 2 (Bag 2 Methane)		0.0045062				--						
	NMOG BAG 2 (Bag 2 Non-methane organic gases)		0.0093719				--						
	METHANE (CH4 - Methane)		0.0056717				--						
	CO (Carbon Monoxide)		0.2958216				--						
	DT-ASCR (Drive Trace Absolute Speed Change Rating)		-0.6667835				--						
	DT-EER (Drive Trace Energy Economy Rating)		-1.5253762				--						
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)		-1.3300141				--						
	MFR FE (Manufacturer Fuel Economy)		999				--						
	NOX (Nitrogen Oxide)		0.0057168				--						
	N2O (Nitrous Oxide)		0.0013879				--						
	HC-NM (Non-methane Hydrocarbon)		0.0103877				--						
	NMOG (Non-methane organic gases)		0.0106993				--						
	PM (Particulate Matter)		0.0010485				--						
	HC-TOTAL (Total Hydrocarbon)		0.0159309				--						
	Test Result Name		Unrounded Test Result				Verify Calculated CO2						
	Carbon dioxide		618.774353				--						
Manufacturer Test Comments		None Unrounded Result for the following test results were modified by Verify: FE BAG 1, FE BAG 2, MFR FE											
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	0.001	--	--	--	--	--	0.001	0.006	Pass	
CA	150,000 miles	California LEV-III ULEV50	PM	0.001	--	--	--	--	--	0.001	0.006	Pass	

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Test #	TFMX10091913	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	06/30/2025	Fuel	N/A
Fuel Batch ID	373-B	Fuel Calibration Number	110
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4194	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)	0.005286	--	
CO (Carbon Monoxide)	0.072328	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.427841	--	
DT-EER (Drive Trace Energy Economy Rating)	-0.44072	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.358448	--	
MFR FE (Manufacturer Fuel Economy)	13	13	
NOX (Nitrogen Oxide)	0.013585	--	
HC-NM (Non-methane Hydrocarbon)	0.002583	--	
NMOG (Non-methane organic gases)	0.00266	--	
HC-TOTAL (Total Hydrocarbon)	0.008236	--	
Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions	685	--	
Test Result Name	Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide	684.6	--	
Manufacturer Test Comments	Drive Mode - Sport Mode with StartStop Active		

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Fuel Properties			
Fuel Batch ID	375-B	Fuel Calibration Number	70
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	07/07/2025
Fuel Batch Calibration Effective Date	07/07/2025	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	0.743
Fuel Ethanol Volume Percent (%)	9.4	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.352	Fuel Carbon Mass Fraction (E10)	0.83
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	Weight Fraction CO2	--
Fuel Batch ID	373-B	Fuel Calibration Number	110
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	05/31/2025
Fuel Batch Calibration Effective Date	05/31/2025	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	0.75
Fuel Ethanol Volume Percent (%)	10.2	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	38.579	Fuel Carbon Mass Fraction (E10)	0.833
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	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	--
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	373-B	Fuel Calibration Number	13
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	02/21/2017
Fuel Batch Calibration Effective Date	02/23/2017	Fuel Batch Calibration Ineffective Date	12/31/2100

Certification Summary Information Report

Test Group	TFMXT03.54JK	Evaporative/Refueling Family	TFMXR0260NDG
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.747
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17942
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		TFMXT03.54JK			Evaporative/Refueling Family		TFMXR0260NDG		
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		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		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	--	--	--	--	--	--	0	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	0	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0	0.030
150,000 miles	N2O	--	--	--	--	--	--	0	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.060
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Certification Summary Information Report

Test Group	TFMXT03.54JK				Evaporative/Refueling Family			TFMXR0260NDG	
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

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	--	--	--	--	--	--	--	0.060
150,000 miles	NOX	--	--	--	--	--	--	--	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			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	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group		TFMXT03.54JK			Evaporative/Refueling Family			TFMXR0260NDG	
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		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

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

Evaporative/Refueling Standards

Evaporative/Refueling Family		TFMXR0260NDG		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	

Certification Summary Information Report

Test Group		TFMXT03.54JK		Evaporative/Refueling Family		TFMXR0260NDG	
Evaporative/Refueling Family		TFMXR0260NDG		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		TFMXR0260NDG		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		
Evaporative/Refueling Family		TFMXR0260NDG		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL	--	0.020	0		
Evaporative/Refueling Family		TFMXR0260NDG		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		
Evaporative/Refueling Family		TFMXR0260NDG		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		TFMXT03.54JK		Evaporative/Refueling Family		TFMXR0260NDG	
Evaporative/Refueling Family		TFMXR0260NDG		Cert Region		Federal	
Cert/In-Use Code		Both		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		TFMXR0260NDG		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		
Evaporative/Refueling Family		TFMXR0260NDG		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		TFMXR0260NDG		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		

Certification Summary Information Report

Test Group		TFMXT03.54JK	Evaporative/Refueling Family		TFMXR0260NDG
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		TFMXT03.54JK		Evaporative/Refueling Family		TFMXR0260NDG	
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				

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Test Group		TFMXT03.54JK	Evaporative/Refueling Family		TFMXR0260NDG
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		