STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
CALIFORNIA AIR RESOURCES BOARD

MOBILE SOURCE CERTIFICATION AND COMPLIANCE FEE PAYMENT FORM FOR ON-ROAD APPLICATIONS ONLY

CARB USE ONLY

Invoice Name	MSF250262
Invoice Date	Sep 16, 2025

COMPANY INFORMATION

Company Name	Ford Motor Company
Address	1 American Road
City	Dearborn
State	Michigan
Zip	48126-2798
Country	United States
Contact Name	Tina Oliver
Contact Telephone Number	313-3238938
Contact Email	toliver@ford.com
CARB Customer Number	CCAM000031

APPLICATION INFORMATION

Payment Row Number	Product Description or File Name	Model Year/Calendar Year	Unique Application Identifier: Test Group, Engine Family, Trailer Family, Vehicle Family, ZEP Family, if applicable (ID listed in payment row must match the unique identifier given to the certification application)	Category Type	Fee Type	Amount
1	26_CBI_TFMXT03.57AT_APP	Model Year 2026	TFMXT03.57AT	Light-duty vehicle test group and medium-duty vehicle test group	Base	$ 48,447.00
2	26_CBI_TFMXT03.51F1_APP	Model Year 2026	TFMXT03.51F1	Light-duty vehicle test group and medium-duty vehicle test group	Base	$ 48,447.00
3	26_CBI_TFMXT02.72V6_APP	Model Year 2026	TFMXT02.72V6	Light-duty vehicle test group and medium-duty vehicle test group	Base	$ 48,447.00
4	OPCARRYOVER_26_CBI_TF	Model Year 2026	TFMXT02.31EM	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	$ 24,224.00
5	26_CBI_TFMXT03.03V7_APP	Model Year 2026	TFMXT03.03V7	Light-duty vehicle test group and medium-duty vehicle test group	Base	$ 48,447.00
6	26_CBI_TFMXT02.71HS_APP	Model Year 2026	TFMXT02.71HS	Light-duty vehicle test group and medium-duty vehicle test group	Base	$ 48,447.00
7	OPCARRYOVER_26_CBI_TF	Model Year 2026	TFMXT02.36HG	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	$ 24,224.00

Total Due	$ 290,683.00

I, _____ , attest that any information provided is true, accurate, and complete.

(Responsible Party Signature Here)

Application for Certification

Part 1

FORD MOTOR COMPANY

APPLICATION FOR CERTIFICATION - PART 1
2026 Model Year

Test Group: TFMXT02.71HS
Durability Group: TFMXGPGNND1B
Evap. Families: TFMXR0140NDG

Test Group Description: 2.7 Liter V6
Federal LDT3 / California LDT

Durability Group Description: Four Stroke, Otto Cycle, Gasoline Fueled, Turbocharged, Port Fuel Injection, Direct Injection, Catalyst Code D

Applicable Standards:

Federal Exhaust	– T3B50
Federal Evap.	– Tier 3
California Exhaust	– LEV-III ULEV50
California Evap.	– LEV-III
Cold NMHC FEL	= 0.3 g/mi (Cold Bin 3)
CH_4 Std.	= 0.030 g/mi
N_2O Std.	= 0.010 g/mi
Particulate Matter	= 3 mg/mi (PM3)
SFTP FEL	= 0.080 g/mi NMOG + NOx

Carlines Covered: Ford Ranger 4WD

Vehicles Tested:

Exhaust Emissions Vehicle: RRD1-2.7-J-729 Config 0			**Evaporative Emissions Vehicle:** MG11-2.3-J-203 Config 0 301W321 (BETP Only) Config 0	
FTP TN (E10):	RFMX91005364		2Day TN:	MFMX10067811
HWY TN (E10):	RFMX91005369		3Day TN:	MFMX10068292
US06 TN (E10):	RFMX91005368		RL TN:	MFMX10067818
SC03 TN (E10):	RFMX10078935		BETP TN:	NFMX10071316
Cold CO TN (E10):	RFMX10078936		ORVR TN:	MFMX10067812
			Linking Test:	MFMX10067778

Release Date: February 23, 2026

For Questions, Contact:
Bryan Szabo / bszabo10@ford.com (+1) 313-515-5890

Part 1 Application Index

Part 2 Application Index

(Running change updates)

SECTION 2

Durability Group Description

For a description of the Durability Group for this test group refer to Section 16.00.00.00 of the Common Section.

SECTION 3

Evaporative/Refueling Family Description

03.00.01.00 Evaporative Family and Calibration Parameters

Evaporative Family Name: TFMXR0140NDG

2026 MY 2.7L GTPFDI Ranger

Emission Component		Sensed Parameter	Controlled Parameter	Justification	Calibration Specification
Fuel Filler Pipe Assembly with Capless Insert MB3G-9032-DG		None	Fuel Tank Vapor, Liquid Fuel Flow, Vapor Recirculation	Operates in EVAP and/or ORVR	Recirc. Orifice Diameter: 2.75 mm
Fuel Limiting Vent Valve 9L34-9B190-AA		Fuel Tank Vapor	Fuel Tank Vapor	Operates in EVAP and/or ORVR	FLVV Main Orifice Diameter: 9.14 mm FLVV Bypass: 1.25 mm
Grade Vent Valve G1FY-9B593-RA (two per tank)		Fuel Tank Vapor	Fuel Tank Vapor	Operates in EVAP	Main Orifice: 3.1 mm Bleed: 0.8 mm
Fuel Tank Pressure Sensor 9U5A-9C052-BC		Fuel Tank Pressure	None	Operates in FTP	
Carbon Canister MB3G-9D653-AC		None	Fuel Vapor	Operates in EVAP and/or ORVR	140g BWC 2.3L Total Volume (includes 0.065L Bleed Element)
Canister Purge Valve EU5A-9G866-CE		Signal from PCM	Vacuum to canister	Operates in FTP	100 SLPM
AIS Hydrocarbon Trap GN15-9T303-AA		None	Fuel Vapor	Operates in EVAP	

SECTION 4

Durability Procedure Description

For a description of the Durability Procedure,
refer to Section 16.00.00.00 of the Common Section.

SECTION 5

Test Group Description

For a description of this Test Group, refer to the Cover Page (00.00.00.00) and to the Test Results Section (07.00.00.00) of this application.

SECTION 6

Test Vehicle Description

For a description of the Test Vehicles utilized in this Test Group, refer to Section 07.00.00.00 of this application.

SECTION 7

EPA Certification Summary Information Report

(Test Results)

Certification Summary Information Report

Manufacturer	Ford Motor Company	**Manufacturer Code**	FMX
Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
Certificate Number	--	**CARB Executive Order #**	--
Certificate Issue Date	--	**Certificate Revision Date**	--
Certificate Effective Date	--	**Conditional Certificate**	--
CSI Revision #	--	**CSI Submission/Revision Date**	09/25/2025 03:20:41 PM
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**	LDT3
Federal Clean Fuel Vehicle	No	**Federal Clean Fuel Vehicle Standard**	--
Federal Clean Fuel Vehicle ILEV	No	**California Partial Zero Emissions Vehicle Indicator**	No
Durability Group Name	TFMXGPGNND1B	**Durability Group Equivalency Factor**	2.5
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	**CAP2000 Conditional Certificate?**	N/A
Independent Commercial Importer?	--	**Alternative Fuel Converter Certificate?**	--
SFTP Federal Composite Compliance Identifier	Tier 3	**SFTP Tier 2 Composite CO Option**	No
SFTP LEV-III Composite Compliance Indicator	Yes		
OBD Compliance Type	CARB	**OBD Demonstration Vehicle Test Group**	TFMXT01.52X1
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: 14.9, City Litmus Threshold: 13.9, Hwy Litmus Value: 20.2, Hwy Litmus Threshold: 19.1.		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Evaporative/Refueling Family Information

Evaporative Summary Information Type	Update for Correction	**Submission/Correction Date**	09/18/2025 02:05:24 PM
Integrated ORVR?	Yes	**Fuel(s)**	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Other	**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 Hydrocarbon Trap
Fuel System Vapor Storage Canister?	Yes	**Other Vapor Storage**	See comments below
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	140	**Number of Primary Canisters**	1
Number of Bleed Canisters	1	**Bleed Canister Total Working Capacity (grams)**	1
Mfr Evaporative/Refueling Family Comments	1 X 2.2L HA 3-port Rect. + 1 X 0.065L 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
TFMXR0140NDG-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	161 - RANGER 4WD	Federal	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	161 - RANGER 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**	V-6
Camless Valvetrain Indicator	No	**Oil Viscosity/Classification**	SAE 5W-30 / ILSAC GF-7
Number of Cylinders/Rotors	6	**Mechanically Variable Compression Ratio Indicator**	N

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

After Treatment Device(s) (ATD)

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

Mfr After Treatment Device (ATD) Comments	2TWC
Direct Ozone Reduction (DOR) Device	Not Equipped
Mfr Emission Control Device Comments	--

Engine Configuration Number 1

Engine Displacement (liters)	2.7	**Engine Rated Horsepower**	315
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	dual intake & exhaust		
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 air fuel	**Air/Fuel Sensor # 1 Description**	--
Air/Fuel Sensor # 2 Type	Heated air fuel	**Air/Fuel Sensor # 2 Description**	--
Air/Fuel Sensor # 3 Type	Heated oxygen	**Air/Fuel Sensor # 3 Description**	--
Air/Fuel Sensor # 4 Type	Heated oxygen	**Air/Fuel Sensor # 4 Description**	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	**Cooled Exhaust Gas Recirculation**	No
EGR Type	--	**Exhaust Gas Recirculation Description if 'Other'**	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	**Air Injection Type if 'Other'**	--
Mfr Engine Configuration Comments	2.7L TiVCT GTPFDI; HP based on Regular Grade Fuel		

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	RFMX91005364	RFMX91005368	RFMX10078935	RFMX10078936	RFMX91005369	82.2	228.2	999.9	286.1	1.0

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Gasoline	RFMX91005364	RFMX91005368	RFMX10078935

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Emission Data Vehicle Information

Vehicle ID / Configuration	301W321 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	NFMXT02.31EM	**Original Evaporative/Refueling Family**	NFMXR0140NDG
Original Test Vehicle Model Year	2022		

Vehicle Model

Represented Test Vehicle Make	Ford	**Represented Test Vehicle Model**	Bronco

Leak Family Details

Leak Family Identifier	001	**Leak Family Name**	NFMXR0140NDG-001

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	1.03
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	MTG1N3NB00	**Rated Horsepower**	270
Displacement (liters)	2.3		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	1	**Air Aspiration Device Configuration**	Single
Charge Air Cooler Type	Air	**Drive Mode While Testing**	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	5136	**Equivalent Test Weight (pounds)**	5500
GVWR (lbs)	6120	**N/V Ratio**	30.2
Axle Ratio	4.7		
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	44.07	0.6921	0.04663	20.96	0.5259	0.04582	26

Emission Control Device Comments 22MY BETP

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Manufacturer Test Vehicle Comments 2.3L GTDI Bronco 4X4

Test #	**NFMX10071316**	**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	02/15/2021	**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	5155	**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)	0.0151	--

Manufacturer Test Comments E10 Evaporative Test Measurement Method is Manufacturer FID w/o speciation. The pull down menu does not include this option.

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	0.0151	0	0.015	0.020	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0151	0	0.015	0.020	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Emission Data Vehicle Information

Vehicle ID / Configuration	MG11-2.3-J-203 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	MFMXT02.31EM	**Original Evaporative/Refueling Family**	MFMXR0140NDG
Original Test Vehicle Model Year	2021		

Vehicle Model

Represented Test Vehicle Make	Ford	**Represented Test Vehicle Model**	Bronco

Leak Family Details

Leak Family Identifier	001	**Leak Family Name**	MFMXR0140NDG-001

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	1.03
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	MTG1N3NB00	**Rated Horsepower**	270
Displacement (liters)	2.3		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	1	**Air Aspiration Device Configuration**	Single
Charge Air Cooler Type	Air	**Drive Mode While Testing**	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	5136	**Equivalent Test Weight (pounds)**	5500
GVWR (lbs)	6120	**N/V Ratio**	30.2
Axle Ratio	4.7		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	10
Transmission Lockup	Yes	**Creeper Gear**	No

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	51.84	0.6755	0.04816	25.85	0.548	0.0465	27.5
Cold CO	51.84	0.6755	0.04816	25.85	0.548	0.0465	N/A
US06	51.84	0.6755	0.04816	25.85	0.548	0.0465	N/A

Emission Control Device Comments T21-0129-01 T3B70 L3B70

Manufacturer Test Vehicle Comments 2.3L GTDI Bronco 4X4

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**MFMX10067778**	**Test Procedure**	**21 - Federal fuel 2-day exhaust (w/can load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	09/22/2020	**Fuel**	N/A
Fuel Batch ID	373-B	**Fuel Calibration Number**	54
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	4795	**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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	486.46295	--
FE BAG 1 (Bag 1 Fuel Economy)	17.78016	17.78016
CO2 BAG 2 (Bag 2 Carbon Dioxide)	453.93757	--
FE BAG 2 (Bag 2 Fuel Economy)	19.11774	19.11774
CO2 BAG 3 (Bag 3 Carbon Dioxide)	452.73368	--
FE BAG 3 (Bag 3 Fuel Economy)	19.13135	19.13135
METHANE (CH4 - Methane)	0.00838	--
CO (Carbon Monoxide)	0.5004	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.917377	--
DT-EER (Drive Trace Energy Economy Rating)	0.0376276	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.0471	--
MFR FE (Manufacturer Fuel Economy)	18.84256	18.84256
NOX (Nitrogen Oxide)	0.01162	--
N2O (Nitrous Oxide)	0.0008	--
HC-NM (Non-methane Hydrocarbon)	0.0101973	--
NMOG (Non-methane organic gases)	0.0112	--
PM (Particulate Matter)	0.0011645	--
HC-TOTAL (Total Hydrocarbon)	0.01809	--

Certification Summary Information Report

Test Group	TFMXT02.71HS	Evaporative/Refueling Family	TFMXR0140NDG

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	461	999
Optional Carbon-Related Exhaust Emissions	461	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	460.34213	--

Manufacturer Test Comments NMOG = 1.04 * NMHCr

Test #	**MFMX10067811**	**Test Procedure**	**23 - 2-day evap**
Exhaust Test # for this Evap Test	MFMX10067778	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	10/09/2020	**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	4969	**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)
OMHCE (Organic material Hydrocarbon Equivalent)	0.3375	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.3375	--

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	0.3375	0.0000	0.338	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.3375	0.0000	0.338	0.500	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**MFMX10068292**	**Test Procedure**	**34 - Federal fuel 3-day evap**
Exhaust Test # for this Evap Test	MFMX10067778	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	11/16/2020	**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	5126	**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)
OMHCE (Organic material Hydrocarbon Equivalent)	0.3726	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.3726	--

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	0.3726	0.0000	0.373	0.500	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.3726	0.0000	0.373	0.500	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**MFMX10067812**	**Test Procedure**	**24 - Federal fuel refueling test (ORVR)**
Exhaust Test # for this Evap Test	MFMX10067778	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	12/02/2020	**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	5050	**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)	0.098	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.098	--

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	0.098	0.002	0.10	0.20	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.098	0.002	0.10	0.20	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**MFMX10067818**	**Test Procedure**	**32 - Federal Fuel Running Loss**
Exhaust Test # for this Evap Test	MFMX10067778	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	11/13/2020	**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	5126	**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	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

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	0.000	0.000	0.00	0.05	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.000	0.0000	0.00	0.05	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Emission Data Vehicle Information

Vehicle ID / Configuration	RRD1-2.7-J-729 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	RFMXT02.71HS	**Original Evaporative/Refueling Family**	RFMXR0140NDG
Original Test Vehicle Model Year	2024		

Vehicle Model

Represented Test Vehicle Make	Ford	**Represented Test Vehicle Model**	Ranger 4WD

Leak Family Details

Leak Family Identifier	001	**Leak Family Name**	RFMXR0140NDG-001

Drive Sources and Fuel System Details

Drive Source and Fuel#	Drive Source	Fuel
1	Combustion Engine	Gasoline

Hybrid Indicator	No		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	--	**Rechargeable Energy Storage System Indicator**	--
Rechargeable Energy Storage System	--	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	**Odometer Correction Factor**	1.03
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	RTRDWQNB00	**Rated Horsepower**	400
Displacement (liters)	2.7		
Air Aspiration Method	Turbocharged	**Air Aspiration Method, if 'Other'**	
Number of Air Aspiration Devices	1	**Air Aspiration Device Configuration**	Single
Charge Air Cooler Type	Air	**Drive Mode While Testing**	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not eqipped	**Aged Emission Components**	4,000 (mi)
Curb Weight (lbs)	4643	**Equivalent Test Weight (pounds)**	5000
GVWR (lbs)	6170	**N/V Ratio**	26.5
Axle Ratio	3.73		
Transmission Type	Semi-Automatic	**# of Transmission Gears**	10
Transmission Lockup	Yes	**Creeper Gear**	No

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	38.85	0.1756	0.03687	15.37	0.1622	0.03472	18.6
Cold CO	38.85	0.1756	0.03687	15.37	0.1622	0.03472	N/A
US06	38.85	0.1756	0.03687	15.37	0.1622	0.03472	N/A

Emission Control Device Comments T3B50/ULEV50

Manufacturer Test Vehicle Comments 2.7L Ford Ranger. Vehicle update submitted to reflect the right B Target coefficients.

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**RFMX10078936**	**Test Procedure**	**11 - Cold CO**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	02/07/2023	**Fuel**	Gasoline
Fuel Batch ID	375-B	**Fuel Calibration Number**	46
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4245	**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)	548.5171	--
FE BAG 1 (Bag 1 Fuel Economy)	15.74102	15.74102
CO2 BAG 2 (Bag 2 Carbon Dioxide)	468.59564	--
FE BAG 2 (Bag 2 Fuel Economy)	18.48506	18.48506
CO2 BAG 3 (Bag 3 Carbon Dioxide)	433.78085	--
FE BAG 3 (Bag 3 Fuel Economy)	19.97123	19.97123
METHANE (CH4 - Methane)	0.00611	--
CO (Carbon Monoxide)	0.24567	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.07605	--
DT-EER (Drive Trace Energy Economy Rating)	2.09095	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.71333	--
MFR FE (Manufacturer Fuel Economy)	18.19801	18.19801
NOX (Nitrogen Oxide)	0.00774	--
HC-NM (Non-methane Hydrocarbon)	0.0227969	--
NMOG (Non-methane organic gases)	0.02513	--
HC-TOTAL (Total Hydrocarbon)	0.02876	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	475.59696	--

Manufacturer Test Comments NMOG = 1.04 * NMHCr

Certification Summary Information Report

Test Group TFMXT02.71HS **Evaporative/Refueling Family** TFMXR0140NDG

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	0.25	--	--	--	0.06	--	0.3	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 50	HC-NM	0.02	--	--	--	0.0108	--	0.0	0.3	Pass
CA	50,000 miles	California LEV-III ULEV50	CO	0.25	--	--	--	0.06	--	0.3	12.5	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**RFMX91005364**	**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	03/22/2023	**Fuel**	Gasoline
Fuel Batch ID	28637	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4259	**Odometer Units**	M
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	517.1826172	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	497.1034546	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	431.84375	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0038474	--
CO (Carbon Monoxide)	0.228958	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.6902187	--
DT-EER (Drive Trace Energy Economy Rating)	1.1577766	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.306886	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0068001	--
N2O (Nitrous Oxide)	0.0002598	--
HC-NM (Non-methane Hydrocarbon)	0.0088356	--
NMOG (Non-methane organic gases)	0.0097047	--
PM (Particulate Matter)	0.0011906	--
HC-TOTAL (Total Hydrocarbon)	0.0125154	--

Certification Summary Information Report

Test Group TFMXT02.71HS **Evaporative/Refueling Family** TFMXR0140NDG

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	483.3105774	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 1, FE BAG 3, 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	CO	0.23	--	--	--	0.18	--	0.4	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.52	--	--	--	--	--	0.5	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	999	--	--	--	0.3	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0038	--	--	--	0.0051	--	0.009	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0003	--	--	--	0.0006	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0097	--	1.1	--	0.0150	--	0.025	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0165	--	--	--	--	--	0.032	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0317	--	--	--	--	--	0.032	0.080	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0068	--	--	--	0.0010	--	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0012	--	--	--	0.0002	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-III ULEV50	CO	0.23	--	--	--	0.18	--	0.4	1.7	Pass
CA	150,000 miles	California LEV-III ULEV50	CO-COMP	0.52	--	--	--	--	--	0.5	4.2	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0097	--	1.1	--	0.0150	--	0.025	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0165	--	--	--	--	--	0.032	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX-COMP	0.0317	--	--	--	--	--	0.032	0.080	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0068	--	--	--	0.0010	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	PM	0.0012	--	--	--	0.0002	--	0.001	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	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**RFMX91005369**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	03/22/2023	**Fuel**	Gasoline
Fuel Batch ID	28637	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4270	**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)	0.0004446	--
CO (Carbon Monoxide)	0.0436754	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	4.5103674	--
DT-EER (Drive Trace Energy Economy Rating)	0.7566817	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	5.9530454	--
MFR FE (Manufacturer Fuel Economy)	27.7995243	--
NOX (Nitrogen Oxide)	0.0012952	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.000084	--
NMOG (Non-methane organic gases)	0.0000865	--
HC-TOTAL (Total Hydrocarbon)	0.0005186	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	311.8620605	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group TFMXT02.71HS **Evaporative/Refueling Family** TFMXR0140NDG

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	999	--	--	--	0.3	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0001	--	1.03	--	0.0150	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0014	--	--	--	--	--	0.017	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0013	--	--	--	0.0010	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0001	--	1.03	--	0.0150	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0014	--	--	--	--	--	0.017	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0013	--	--	--	0.0010	--	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	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**RFMX91005368**	**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	03/22/2023	**Fuel**	Gasoline
Fuel Batch ID	28637	**Fuel Calibration Number**	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	**DF Type**	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4290	**Odometer Units**	M
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	713.9923096	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	397.713562	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0060877	--
CO (Carbon Monoxide)	0.4492728	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-2.6504657	--
DT-EER (Drive Trace Energy Economy Rating)	-1.3178047	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-4.6776834	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0096219	--
N2O (Nitrous Oxide)	0.0006651	--
HC-NM (Non-methane Hydrocarbon)	0.0189839	--
NMOG (Non-methane organic gases)	0.0195534	--
PM (Particulate Matter)	0.0010949	--
HC-TOTAL (Total Hydrocarbon)	0.0249337	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	467.6732483	--

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

Certification Summary Information Report

Test Group TFMXT02.71HS **Evaporative/Refueling Family** TFMXR0140NDG

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0011	--	--	--	0.0002	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-III ULEV50	PM	0.0011	--	--	--	0.0002	--	0.001	0.006	Pass

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Test #	**RFMX10078935**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	02/03/2023	**Fuel**	N/A
Fuel Batch ID	373-B	**Fuel Calibration Number**	76
Vehicle Class	N/A	**DF Type**	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4028	**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)
CO (Carbon Monoxide)	0.48856	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.66855	--
DT-EER (Drive Trace Energy Economy Rating)	2.48866	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.42394	--
MFR FE (Manufacturer Fuel Economy)	16.01702	16.01702
NOX (Nitrogen Oxide)	0.00633	--
HC-NM (Non-methane Hydrocarbon)	0.0103367	--
NMOG (Non-methane organic gases)	0.01065	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0166667	--
HC-TOTAL (Total Hydrocarbon)	0.01902	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	543.79621	--

Manufacturer Test Comments Measured NMOG

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Fuel Properties

Fuel Batch ID	**28637**	**Fuel Calibration Number**	**1**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	08/26/2021
Fuel Batch Calibration Effective Date	08/26/2021	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.75
Fuel Ethanol Volume Percent (%)	9.6	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17894
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	**Weight Fraction CO2**	--

Fuel Batch ID	**373-B**	**Fuel Calibration Number**	**76**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	01/02/2023
Fuel Batch Calibration Effective Date	01/02/2023	**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 (%)	9.8	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17918
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.83	**Weight Fraction CO2**	--

Fuel Batch ID	**375-B**	**Fuel Calibration Number**	**46**
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	**Fuel Batch Calibration Date**	01/02/2023
Fuel Batch Calibration Effective Date	01/02/2023	**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**	0.746
Fuel Ethanol Volume Percent (%)	10.2	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17940
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	**Weight Fraction CO2**	--

Fuel Batch ID	**373-B**	**Fuel Calibration Number**	**54**
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	08/31/2020
Fuel Batch Calibration Effective Date	08/31/2020	**Fuel Batch Calibration Ineffective Date**	12/31/2100

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
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 (%)	9.6	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	17958
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	**Weight Fraction CO2**	--

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Consolidated List of Standards

Exhaust Standards

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	0.0150	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0010	999.999

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	--	--	--	0.3	999.999
150,000 miles	N2O	--	--	--	--	--	--	--	0.010
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0150	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	0.0010	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0.6	999.999

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	--	--	--	0.18	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	CREE	--	--	--	--	--	--	0.3	999.999
150,000 miles	HCHO	--	--	--	--	--	--	0.0003	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0.0051	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0006	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0150	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.080
150,000 miles	NOX	--	--	--	--	--	--	0.0010	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0.6	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.003

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	--	--	--	0.06	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0108	0.3

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	--	--	--	0.18	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	HCHO	--	--	--	--	--	--	0.0003	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0150	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.080
150,000 miles	NOX	--	--	--	--	--	--	0.0010	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.003

Cert Region	Federal	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	CO	--	--	--	--	--	--	--	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.006

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	CO	--	--	--	--	--	--	--	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.006

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Both
Vehicle Class	LDT3 (ALVW 3751-5750, 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	--	--	--	--	--	--	0.06	12.5

Evaporative/Refueling Standards

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.002

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.0000

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Evaporative/Refueling Family	TFMXR0140NDG	**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	TFMXR0140NDG	**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	TFMXR0140NDG	**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	0.0000

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.0000

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.0000

Certification Summary Information Report

Test Group	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.000

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.002

Evaporative/Refueling Family	TFMXR0140NDG	**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	0.0000

Certification Summary Information Report

Test Group	TFMXT02.71HS	Evaporative/Refueling Family	TFMXR0140NDG

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	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
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	TFMXT02.71HS	**Evaporative/Refueling Family**	TFMXR0140NDG
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

SECTION 8

Emission Testing Waiver Statements

Refer to Section 14.01.00.00 of Common Section for Statements of Compliance.

SECTION 8

Emission Testing Waiver Statements and Statements of Compliance

Statement of Compliance for test group TFMXT02.71HS

Ford Motor Company's test and production vehicles do not have defeat devices. All AECDs have been declared and described in the application. This test group has been designed and engineered to comply with 40 CFR 86.1809-12 (prohibition of defeat devices), satisfies 40 CFR 86.1844-01 (application submittal requirements for AECDs), and does not utilize alternate emissions control maps that are unique for testing purposes relative to on road operation.

Is the transmission part of any AECD, for example, by receiving outputs from the ECU or providing inputs to the ECU, in any emission control strategy, for example, engine and/or catalyst warm-up?
If yes, please describe, including purpose, entry/exit conditions, actuations, and justifications.

Ford describes the transmission controls and potential interaction effects within the confidential AECD documentation found in section 16.05.00 of the common section area of the application submittals. This documentation covers the purpose, inputs, controlled actions, and justifications. For example, as referenced in the Drive Speed Control section of that document, the transmission can receive requests from the ECU to delay upshifts based on cold engine coolant temperature and/or low inferred catalyst temperature to assist with engine or catalyst warm-up.

Does the transmission behave and perform the same as, or differently than, while on road versus on a dynamometer? Please explain any differences.

Ford does not attempt to discern whether the vehicle is operating on a dynamometer or on the road. However, there are certain conditions that can cause the transmission to operate differently based on the sensed inputs that may not be encountered during dynamometer testing. For example, when climbing grades or when towing, the transmission will make gear ratio adjustments to compensate against excessive engine lugging and reduced vehicle response. There can also be unique transmission scheduling in different customer selectable drive modes, such as EcoSelect, Sport, Snow, Rock Crawl, etc. The types of conditions that are anticipated to cause transmission adjustments are described in the confidential AECD descriptions located in 16.05.00 of the common section. For customer-selectable drive modes that could reasonably be driven over emission test cycles, Ford evaluates emission performance to assure that these modes meet applicable emission standards.

Special dynamometer test modes are required for certain vehicle technologies such as start/stop and HEVs to assure that fault conditions are not set while operating on two-wheel drive dynamometers. This allows the vehicles to behave normally, as they would on the road, rather than causing default/FMEM actions to occur due to significant wheel speed differences between the front and rear axles.

For additional statements of compliance, please refer to Section 14.01.00.00 of the Common Section.

SECTION 9

OBD-II System Description

For a description of the OBD System utilized for this Test Group, refer to Section 16.06.00.00 of the Common Section.

SECTION 10

Description of Alternate-Fueled Vehicles

For a description of the Alternate-Fueled vehicles covered by this Test Group, refer to Section 12.00.00.00 (Description of Vehicles Covered by Certificate and Test Parameters) of this Application.

SECTION 11

AECD Description

For a description of the AECDs utilized in this Test Group,
refer to Section 16.00.05.00 of this application,
and 16.05 of the Common Section.

SECTION 12

Description of Vehicles Covered by Certificate

and

Testing Parameters

12.00.01.00 Common Family Parameters

Test Group: TFMXT02.71HS - Engine Config Param 1 - 2.7L TiVCT GTPFDI; HP based on Regular Grade Fuel

Test Group Information : 2.7L TiVCT GTPFDI; HP based on Regular Grade Fuel	
Vehicle/Engine Class	LDT3
Vehicle Fuel Category	Single Fuel
Operating Fuel 1	Gasoline
Operating Fuel 2	N/A
Engine Displacement (liters)	2.7
SAE net HP @ RPM (91 Ron)	315 @ 5000 RPM
SAE net torque ft-lb @ RPM	400 @ 3000 RPM
VECI - Emission Control System	
Air Aspiration Method	Turbocharged
Charge Air Cooler Type	Air
Exhaust Gas Recirculation (EGR)	No
Cooled EGR	No
Air injection Type (AIR)	Not Applicable
After-Treatment Type	Three-way catalyst
Fuel Metering System 1	Spark Ignition direct & ported injection
Fuel Metering System 2	N/A
Heated oxygen sensor (HO_2S)	Yes
Heated Air/Fuel Sensor or WR oxygen sensor (AFS/WR-HO_2S)	Yes
Feedback Sensor Configuration	2 WR-H02S, 2 HO2S
Shift Schedules	See Common Section
EVAP Canister working Capacity	See Common Section
EVAP Canister Bed Volume	See Common Section
Fuel Tank Temperature Profile	See Common Section

Exhaust Calibration	Evaporative Family	Application	Transmission	Leak Check	Vehicle
TTRDWQNA05	TFMXR0140NDG	50S (GS)	10R60 auto	0.020	20.0 gal

Reference Specifications		
Spark Plug	Type: CYFS-092YPT Gap: 0.8 +0/-0.1 mm	
Ignition Timing ^{O}BTDC (No SPOUT connector)	PCM Controlled	
Idle RPM	PCM Controlled	
Target (Base) in Drive (A/C OFF/A/C ON)	A/T: 655/655 rpm	Special conditions which may require idle speeds higher than base are listed below. (See Section 16.05 for descriptions of these strategies):

Potential Idle/Drive Speed Modifier	Function Utilized (Y/N)	Purpose
A/C Operation	Y	Compressor performance
Low or high air charge temperature	Y	Heater, A/C or engine cooling performance
Low catalyst temperature	Y	Achieve/maintain light off
Low engine coolant temperature	Y	Combustion stability
Low or high ambient temperature	Y	Heater or A/C performance
High transmission oil temperature	N	Ensure adequate fluid pressure
Low battery voltage	Y	Avoid stalling or no-start
High Alternator load	Y	Preserve battery life and avoid low voltage
High-speed fan operation	N	For engine and A/C condenser cooling
Extended neutral idle time	Y	Maintain catalyst temperature
Power steering pressure	N	Ensure adequate P/S assistance
Power steering position	N	Ensure adequate P/S assistance
High Altitude	Y	Maintain air mass flow to avoid stalling
Alternate calibration	Y	Avoid spark plug fouling during plant/dealer handling
Drive Speed Control or Shift Delay	Y	Increase engine speed to improve cabin heating or cooling

Emission Component	Sensed Parameter	Controlled Parameter	Justification[1]	Calibration
ELECTRONICS – PCM[2]				
FUEL				
Fuel Injector	Signal from PCM	Fuel Flow	N/A	Static Flow Rate: 20.0 +/-0 .64 cc/sec
Regulated Fuel Pressure	Signal from PCM	Fuel Pressure	N/A	N/A CLPC
Fuel Pump	Signal from PCM	Fuel Flow	N/A	Nom. Flow Rate: 260 L/H @500kpa-12V
Torque Based Electronic Throttle Control	Signal from PCM	None	Operates in FTP	Throttle Diameter: 61.6 mm
Fuel System Control Strategy[2]				
Open loop enrichment for driver torque demand	Throttle Position or Pedal Position or Engine LOAD, and Engine RPM	Air-Fuel Ratio (LAMBSE)	Protection against damage or accident; provides additional power under extended torque demand	See Section 16.00.05.00 for air-fuel calibration (LAMBSE) in function
Open Loop Delay Timers	Time and Gear	Delay open loop fuel	Allows time for downshift; limit enrichment to unusual conditions	See Section 16.00.05.00 for delay time calibration and the maximum open-loop count-up time

Emission Component	Sensed Parameter	Controlled Parameter	Justification[1]	Calibration
Open Loop Enrichment Catalyst Protection	Inferred Catalyst Temperature	Air-Fuel Ratio (LAMBSE)	Protection against damage	See Section 16.00.05.00 for inferred catalyst temperature to trigger enrichment
Open Loop Enrichment EGO Protection	Inferred Oxygen Sensor	Air-Fuel Ratio (LAMBSE)	Protection against damage	See Section 16.00.05.00 for inferred EGO temperature to trigger enrichment

1 – Justification provided for AECD systems (i.e. sense operating conditions and control the function of an emission component) and not for the individual components.
2 – See Section 16.05 for Strategy Control Systems descriptions
3 – "FTP" represents all tests required for certification
* – indicates that ending characters on some parameter names may vary

	Temperature			
Open Loop Enrichment Engine/Exhaust Manifold Protection	Inferred Exhaust Manifold Flange Temperature	Air-Fuel Ratio (LAMBSE)	Protection against damage	See Section 16.00.05.00 for inferred exhaust flange temperature
Open Loop Enrichment following Deceleration Fuel Shut-Off (DFSO)	Injector state, inferred catalyst O_2 stored, and CMS voltage	Air-Fuel Ratio (LAMBSE)	Substantially demonstrated on FTP	See Section 16.00.05.00 for air-fuel ratio utilized following fuel shut-off event
CRANKCASE				
PCV Valve	Manifold Vacuum	Air Flow to Engine	Operates in FTP	EV#:290 2.55 - 3.75 SCFM @ 3" Hg 2.00 - 3.20 SCFM @ 8" Hg 0.90 - 2.10 SCFM @ 8" Hg 0.85 - 1.65 SCFM @ 15" Hg 0.50 - 1.30 SCFM @ 15" Hg
EGR Valve	Signal from PCM	Exhaust Gas	Operated in FTP	25 +/- 0.75 SCFM @ 0.64mm open 135 +/- 4.05 SCFM @ 5.1mm open
EGR Orifice	EGR Gases	EGR Gases	Operated in FTP	Orifice Dia: 5.7mm
EGR Control Strategy				
BASE EGR Table	Engine Speed and Load	Requested EGR Flow	EGR optimized for fuel efficiency within constraints of combustion stability, driveability, component temps, emissions, and vacuum limitations	See Section 16.00.05.00 for HDFX_EGR_MAXTOL_STP_
Engine Icing Prevention	Air Charge Temp	EGR Flow	Protection against damage or accident	See Section 16.00.05.00 for EGR_ACT_MIN
Hot Intake Air Limitation	Air Charge Temp	EGR Flow	Engine protection	See Section 16.00.05.00 for EGR_ACT_MAX

Emission Component	**Sensed Parameter**	**Controlled Parameter**	**Justification[1]**	**Calibration**
VCT Control Strategy				
Cam timing based on requested torque and percent torque	Requested Torque, Percent Torque, Engine Speed, and Load	Cam Phase Timing	VCT optimized for fuel efficiency within constraints of combustion stability, drivability, emissions, and vacuum limitations	See Section 16.00.05.00
Cam Timing Limitation for Combustion Stability	Requested Torque and Engine Speed	Cam Phase Timing	Protection against damage or accident	See Section 16.00.05.00
Cam Actuator Limitation for Oil Temperature	Oil Temperature; or Time-since-start and ECT-at-start	Cam Phase Timing	Protection against damage or accident	See Section 16.00.05.00
Cam Actuator Limitation for start-up	Engine Coolant Temp. at start and time-since-start	Cam Phase Timing	Protection against damage or accident	See Section 16.00.05.00
Cam Retard Limitation under Hi Torque Demand	Engine Speed and Requested Torque	Cam Phase Timing or Throttle Position	Protection against damage or accident under high torque demand	See Section 16.00.05.00
Cam Actuator Limitation for ACT Effects	Air Charge Temperature	Cam Phase Timing	Protection against damage or accident by maintaining combustion stability	See Section 16.00.05.00

	Sensed	**Controlled**		

1 – Justification provided for AECD systems (i.e. sense operating conditions and control the function of an emission component) and not for the individual components.
2 – See Section 16.05 for Strategy Control Systems descriptions
3 – "FTP" represents all tests required for certification
* – indicates that ending characters on some parameter names may vary

Emission Component	Parameter	Parameter	Justification[1]	Calibration
ENGINE COOLING				
Thermostat	Coolant Temperature	Coolant Flow	Engine Protection	Start to Open: 87.5° C

1 – Justification provided for AECD systems (i.e. sense operating conditions and control the function of an emission component) and not for the individual components.
2 – See Section 16.05 for Strategy Control Systems descriptions
3 – "FTP" represents all tests required for certification
* – indicates that ending characters on some parameter names may vary

2026 MY Exhaust Emissions Parts List
Test Group: TFMXT02.71HS

Carline Name	Certification Level	Cert Code	Calibration(s)	PCM Assembly Part #	Date
RANGER 4WD	Initial	TTRDWQNA0000	TTRDWQNA05	PTB3A-12A650-XA	06/05/2025

ALL OTHER EXHAUST EMISSION PARTS

Engine Family: TFMXT02.71HS

2026MY2.7L RANGER 4WD

Part Name	Part Number
Ambient Air Temperature Sensor	AU5T-12A647-AC
Camshaft Position Sensor Assembly	RL3A-12K073-AB
Catalyst (RH)	MB3G-5E212-NA
Catalyst (LH)	MB3G-5E214-KH
	FT4A-6C315-BB
Crank Position Sensor Cylinder Head	P2GA-6G004-AC
Temp Sensor Electronic Throttle Body	JT4E-9F991-AA
Engine Coolant Temperature Sensor	JL3A-12A648-BA
Fuel Injector (DI)	N2DE-9G929-AA
Fuel Injector (PFI)	JT4E-9F593-BA
Fuel Pressure Sensor (High Pressure)	KT4E-9F972-AA
Fuel Pressure Sensor (Low Pressure)	KT4E-9F972-AA
Fuel Pump High Pressure	NL3E-9D376-AA
Heated Air/Fuel Sensor (WR-HO2S)	SB3G-9Y460-AA
Heated Oxygen Sensor (CMS)	MB3G-9G444-BC
	MB3G-9G444-CB (alt)
	RB3G-9G444-BA (alt)
Integrated Fuel Pressure Sensor (Low Pressure)	HX7G-9G756-AC
Knock Sensor	FT4A-12A699-BH
Manifold Absolute Pressure Sensor	RL3A-9F479-AB
PCV Valve	KR3E-6A666-BA
Turbo Charger (LH)	MB3E-6C879-AF
Turbo Charger (RH)	MB3E-6K682-AF
VCT Solenoid	FT4E-6B297-BB
Fuel Pump Low Pressure	ML34-9350-AA
Intake Air Temperature Sensor (IAT)	DS7A-12A697-AA

2026 TEST VEHICLE REQUIREMENTS

	Evaporative Emission Vehicle	**Evaporative Emission Vehicle**	**Exhaust Emission Vehicle**
Test Group	NFMXT02.31EM	MFMXT02.31EM	RFMXT02.71HS
Evap Emission Family	NFMXR0140NDG	MFMXR0140NDG	RFMXR0140NDG
Displacement	2.3L	2.3L	2.7L
Engine Code	MTG1N3NB00	MTG1N3NB00	RTRDWQNB00
Fuel Tank Capacity	22.2 Gal	20.0 Gal	20 Gal
Exhaust Control System	TWC, HO2S, WR-HO2S, TC, CAC, DFI, SFI, EGR, EGRC	WC, HO2S, WR-HO2S, TC, CAC, DFI, SFI, EGR, EGRC	TWC/HO2S/WR-HO2S/EGR/EGRC/CAC/TC/DFI/SFI
Model	Bronco	Bronco	Ranger 4WD
Transmission	Semi-Auto-10	Semi-Auto-10	Semi-Auto-10
Equivalent Test Weight	5500.0	5500.0	5000.0
Curb Weight	5136.0	5136.0	4643.0
GVWR	6120.0	6120.0	6170.0
THP/DPA	26 / f0=44.07, f1=0.6921, f2=0.04663	27.5 / f0=51.84, f1=0.6755, f2=0.04816	18.6 / f0=38.85, f1=0.1756, f2=0.03687
Axle Ratio	4.7	4.7	3.73
N/V Ratio - RPM/MPH	30.2	30.2	26.5
Tires	LT315/70R17	LT315/70R17	255/70R17
Vehicle ID No	301W321	MG11-2.3-J-203	RRD1-2.7-J-729
Configuration Number	0	0	0
Model Year	2022	2021	2024

Vehicle Description Report

Test Group: TFMXT02.71HS

ID Number	5279295
Displacement	2.7
Cert Code	TTRDWQNA0000
Fuel Tank(s)	RP
Carline	RANGER 4WD
Wheel Configuration	Standard
Body Style	Crew Cab
Wheelbase	128.7
Transcode Combo	ETD
Curb Weight	4694
ETW	5000
Loaded Weight LVW	4994
ALVW-ETW	5500
Adj. Loaded Weight	5432
GVWR	6170
GCWR	12745
Min Axle Ratio	3.73
Max Axle Ratio	3.73
Min N/V Ratio	26.5
Max N/V Ratio	26.5
Emission Vehicle Class	LDT3
Drive Code	Part-time 4-Wheel Drive
Trans Type	Semi-Automatic
Calibration Application	FED
Min Tire Size	255/65R18 - 26.5
Max Tire Size	LT255/70R17 - 26.5
Alt Tire 1	255/70R17 - 26.5
Alt Tire 2	
Alt Tire 3	
Alt Tire 4	
Alt Tire 5	
Alt Tire 6	
Alt Tire 7	
DAW Full Tank	1966
DAW Empty Tank	1870

SECTION 14

Request for Certification

Environmental & Safety Compliance
Ford Motor Company

Allen Park Test Laboratory
1500 Enterprise Drive, Suite 3W-200
Allen Park, Michigan 48101-2053

Ms. Hannah Frame
Certification Division
Mobile Source Pollution Control
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

September 23, 2025

Dear Ms.Frame:

Ford Motor Company (Ford) herewith submits its Part I Application for Certification for 2026 model year Light-duty trucks (LDTs) contained in Ford's 50 states test group TFMXT02.71HS and evaporative emission family TFMXR0140NDG. The test fuel used is E10.

The EPA Final Tier 3 certification and in-use exhaust emission standards applicable to this test group are:

Certification & In-Use FTP Standards (g/mi)	**Useful Life**	**NMOG+NOx (g/mi)**	**CO (g/mi)**	**PM (g/mi)**	**HCHO (g/mi)**	**N20 (g/mi)**	**CH4 (g/mi)**
Federal Tier 3 Bin 50	150K	0.050	1.7	0.003	0.004	0.010	0.030

This test group meets the SFTP NMOG+NOx Composite Family Emission Limit (FEL) of 0.080 g/mi and CO FEL of 4.2 g/mi.

The EPA Tier 3 certification and in-use evaporative emission standards applicable to this test group are:

Tier 3	**Useful Life**	**Hot Soak + 2-day diurnal (g/test)**	**Hot Soak + 3-day diurnal (g/test)**	**Running Loss (g/mi)**	**ORVR (g/gal)**	**BETP (g/test)**
Evaporative Standards TFMXR0140NDG	150K	0.500	0.500	0.05	0.20	0.020

The Fuel Spitback standard is 1.0 gram per test for this Testgroup.

Based on Ford Motor Company's good engineering judgment, all the vehicles described in this Application are designed to comply with the applicable intermediate and full useful life standards, as described above.

This Part I application for certification has been prepared in accordance with the standardized format recommended by EPA via its mail out 1, subject: Ford Motor Company (Ford) herewith submits its Part I Application for Certification for 2025 model year gasoline powered light-duty vehicles (LDVs) contained in Ford's 50 states test group, dated July 4, 2025. Therefore, in accordance with the provisions of 40 CFR 86.1844-01(d)(14) including the provisions of 40 CFR Parts 85 including the provisions of 86 and 600,, Ford requests that a Certificate of Conformity be issued for the LDT test group listed in this Application for Certification.

Please contact Bryan Szabo at 313-515-5890 or bszabo10@ford.com, if you have any questions regarding this submission.

Sincerely

DocuSigned by:

Lawrence H. Merritt, Jr.

DF6ED4749EAC46B...

Lawrence H. Merritt, Jr., Manager
Emissions Certification
Homologation, & Compliance

Environmental & Safety Compliance
Ford Motor Company

Allen Park Test Laboratory
1500 Enterprise Drive, Suite 3W-200
Allen Park, Michigan 48101-2053

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

September 23, 2025

Dear Ms.Lang:

Ford Motor Company (Ford) herewith submits its Part I Application for Certification for 2026 model year Light-duty trucks (LDTs) contained in Ford's 50 states test group TFMXT02.71HS and evaporative emission family TFMXR0140NDG. The test fuel used is E10. This application aligns with CARB's Manufacturers Advisory Correspondence (MAC) ECCD-2025-8 alternate pathway (1) described on page 2 as follows:

(1) An approved application for CARB certification to the vehicle and engine emission regulations that immediately preceded those covered by the waivers that were targeted by the congressional resolutions.

Ford intends submittal of this certification to facilitate CARB's review in order to ensure timely certification of Ford's vehicles as may be needed in accordance with applicable requirements. Ford is reserving its rights with regard to determining what requirements apply and which requirements can be enforced by CARB.

The FTP certification and in-use standards applicable to this test group for vehicle offered in California are as follows:

Certification & In-Use FTP Standards (g/mi)	**Useful Life**	**NMOG+NOx (g/mi)**	**CO (g/mi)**	**PM (g/mi)**	**HCHO (g/mi)**
California LEV-III ULEV50	150K	0.050	1.7	0.003	0.004

This test group meets the SFTP NMOG+NOx Composite Family Emission Limit (FEL) of 0.080 g/mi and CO FEL of 4.2 g/mi.

The evaporative certification and in-use standards applicable to this test group are as follows:

LEV III	**Useful Life**	**Hot Soak + 2-day diurnal (g/test)**	**Hot Soak + 3-day diurnal (g/test)**	**Running Loss (g/mi)**	**ORVR (g/gal)**	**BETP (g/test)**
Evaporative Standards TFMXR0140NDG	150K	0.500	0.500	0.05	0.20	0.020

The Fuel Spitback standard is 1.0 gram per test for this Testgroup.

Based on Ford Motor Company's good engineering judgment, all the vehicles described in this Application are designed to comply with the applicable intermediate and full useful life standards, as described above.

This Part I application for certification has been prepared in accordance with the standardized format recommended by EPA via its mail out 1, subject: Ford Motor Company (Ford) herewith submits its Part I

Application for Certification for 2025 model year gasoline powered light-duty vehicles (LDVs) contained in Ford's 50 states test group, dated July 4, 2025. This Application has also been prepared in accordance with the California Air Resources Board, Final Regulation Order, Amendments to Sections 1960.1, 1960.5, 1961, and 1962 Title 13, California Code of Regulations (As Amended August 4, 2005). Therefore, in accordance with the provisions of 40 CFR 86.1844-01(d)(14) including the provisions of 40 CFR Parts 85 including the provisions of 86 and 600, Ford requests that an Executive Order be issued for the LDT test group listed in this Application for Certification.

Please contact Bryan Szabo at 313-515-5890 or bszabo10@ford.com, if you have any questions regarding this submission.

Sincerely

DocuSigned by:
Lawrence H. Merritt, Jr.
DF6ED4749EAC46B...

Lawrence H. Merritt, Jr., Manager
Manager, Emissions Certification
Homologation, & Compliance

cc: R. Uyehara

cc: M. Desai

SECTION 15

Other Information

SAP Manual Payment Request
(North America)

REF NO: 306181

NAME AND ADDRESS OF PAYEE	Employee	Ex-Employee / Board of Director	Company Code	Separate Check	Special Handling/ Instruction Key in S4
Environmental Protection Agency-MVECP				Y	
U.S. Bank - Government Lockbox 979032	Supplier Code		Due Date / Baseline Date	Currency	Amount
1300 Pennsylvania Ave NW - Washington DC 20004-3002 The requestor is responsible to ensure the supplier code has correct company name, remit to and/or banking information whether the payment is going by check or electronically/ACH.	GXHSA		ASAP	USD	197,634.00

REASON FOR DISBURSEMENT

CERTIFICATION FEES - EPA STANDARD ENGINE FAMILY, EXHAUST EMISSION CONTROL SYSTEM

Alternate Name & Address

COMMENTS (Shown on Remittance Advice/Not to include PII)

2026 MODEL YEAR CERTIFICATION FEES - (FORMS ATTACHED)

GL Account	Profit Center	Cost Center	Internal Order	Reference Key1	Reference Key2	INVOICE #	INVOICE DATE	AMOUNT (Bracket Credits)	1099 Tax Type
63044030	2000005001	1000017919				306181	7/7/2025	197,634.00	N
								-	
							TOTAL	197,634.00	

Pre-requisites for Payment :

1. Requestors or Approvers to ensure the following
   - Receipt of Service
   - Price Validation
   - Supported by invoice or other documentation
2. Uses of Manual Payment Requests
3. Corporate Approval Authorities - Method of Payment

TYPE OF INVOICE:	MANUAL PAYMENT REQUEST -PERMISSIBLE USES (use drop down with Alt+down arrow key):	Uses of Manual Payment Requests	Not in Uses of Manual Payment Request

Requestor

Preparer/Requestor	CDS ID	Date
	TOLIVER	7/7/2025

Operations Approval - Receipt of Service

	CDS ID	DocuSigned by:	Date
Operations Approval	LMERRIT2	Lawrence Merritt DF6ED4749EAC46B...	7/7/2025

Approvals per Corporate Approval Authorities - Method of Payment

Payment Item is on	CDS ID	DocuSigned by:	Date
Finance LL6+ Unlimited	PBLANCAS	Bedolla, Montserrat 9B61ABEC83D24AA...	7/7/2025

Payment Item is NOT on Uses of Manual Payment Requests	CDS ID	Sign	Date
Finance LL5+ Unlimited			

It is important to protect personal data when retaining and forwarding this Payment Authorization Form and attachments, if any.
Every effort must be made to prevent exposure.

The space below may be used for additional local requirements

May 2025 North American Check Request Form (Previous editions without the above fields may NOT be used)

Note: Approved forms can be sent to NAPAP@ford.com for processing

306181

US EPA Fee Form

David Perez

Pay.gov Tracking ID: 27P0UFTC
Agency Tracking ID: 77075588996

Help and EPA Instructions

* Required Field

General Information

Date: 06/18/2025

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

FMX

Manufacturer Name *

Ford Motor Company

Contact Name *

Tina Oliver

Contact Email Address *

toliver@ford.com

Contact Phone *

313-323-8938

Calendar Year complete application submitted to EPA *

2025

PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2025, through December 31, 2025. The applicable fee is determined by the

calendar year in which the complete certification application is received, not the model year.

Engine Family / Evaporative Family / Test Group *

TFMXT02.71HS

Certificate Request Type (Industry Sector Code)

Certificate Request Type *

- (●) On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- ( ) On-Highway HDE Dyno Cert (Federal) (E, H)
- ( ) On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- ( ) On-Highway Motorcycle (C)
- ( ) On-Highway HDV Evap (F)
- ( ) On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- ( ) On-Highway HDE Dyno Cert (California-Only) (E, H)
- ( ) Nonroad CI (L)
- ( ) Nonroad SI (B, S)
- ( ) Locomotive (G, K)
- ( ) All Nonroad Recreational, excluding Marine engines (X, Y)
- ( ) All Marine (Including IMO) (M, N, W)
- ( ) Component Certification for Evaporative Emissions (P)

IMO Name (Required for dual US/IMO Marine Only)

ICI VIN Number (Required for ICIs Only)

Do you qualify for a Reduced Fee? *

No

Payment Information

Amount Owed

$32,939.00

Payment Type *

Offline ACH

Comments

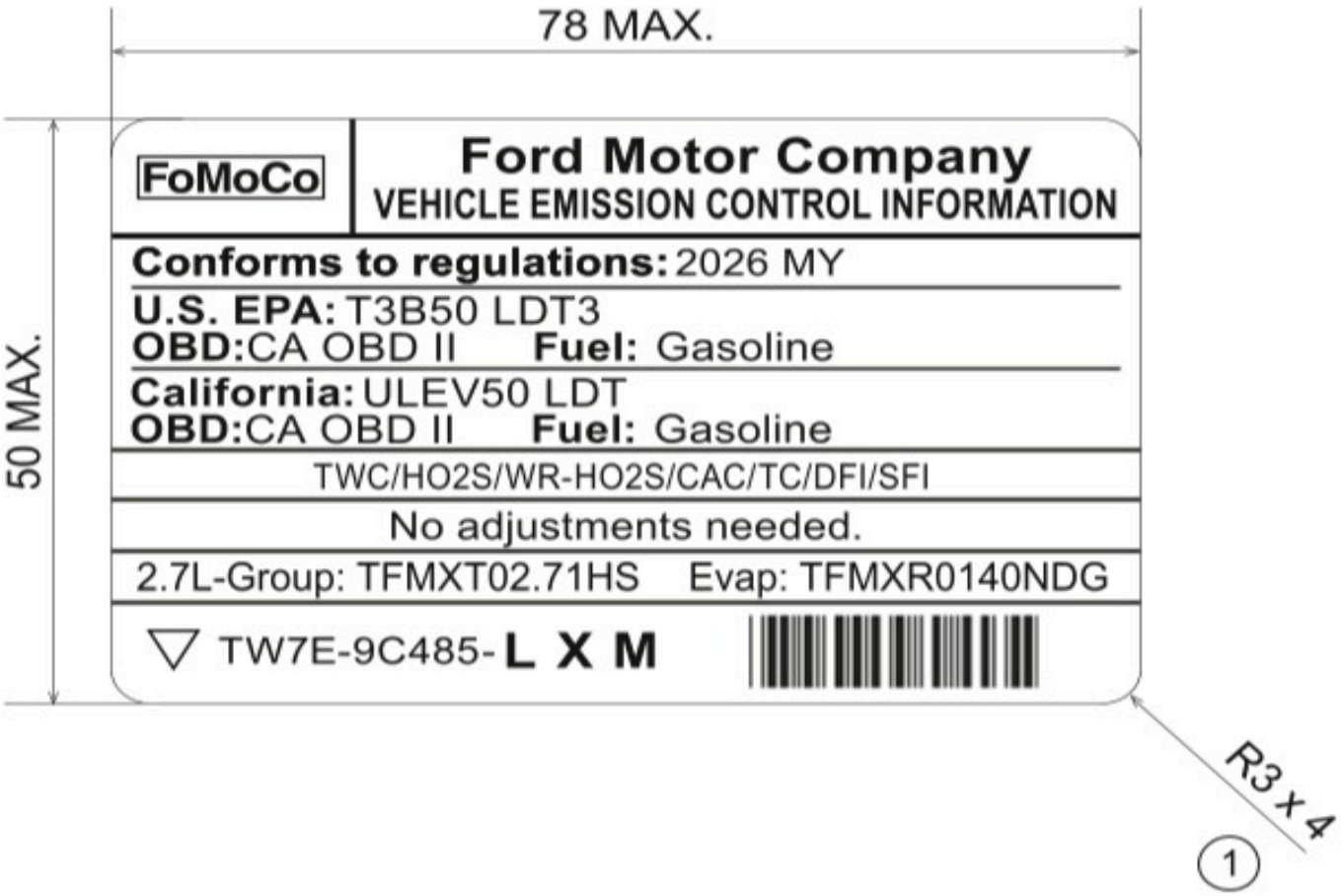
David G. Perez Sifuentes. Ranger 2.7L

EPA Form Number 3520-29
OMB Control No. 2060-0545
Approval expires 7/31/2027
The public reporting and recordkeeping burden for this collection of information is estimated to average 12 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

SECTION 17

California ARB Requirements

TFMXT02.71HS



SECTION 18

REVISIONS

APPLICATION REVISIONS

TFMXT02.71HS

NO.	DATE	PAGE(S)	DESCRIPTION