

Certification Summary Information Report

Manufacturer	Ford Motor Company	Manufacturer Code	FMX
Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Certificate Number	TFMXT02.36HG-063	CARB Executive Order #	--
Certificate Issue Date	10/23/2025	Certificate Revision Date	--
Certificate Effective Date	10/23/2025	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	09/18/2025 02:46:14 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	TFMXGPGNNE2A	Durability Group Equivalency Factor	1.9
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	02/23/2026	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	TFMXT01.52X1
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	2
OBD Deficiencies Comments	--		
Mfr Test Group Comments	LITMUS RESULTS (EPA E0 3-CYCLE): City=17.9 vs 17.5 threshold, HWY=22.4 vs. 21.3 threshold		
Mfr Exhaust / Evap Standards Comments	--		

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Test Group	TFMXT02.36HG	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	California + CAA Section 177 states	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	160 - RANGER 2WD	Federal	2-Wheel Drive, Rear	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	161 - RANGER 4WD	Federal	Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	160 - RANGER 2WD	California + CAA Section 177 states	2-Wheel Drive, Rear	Semi-Automatic	10	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	Inline	Mfr Engine Block Arrangement Description	2.3L I-4				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	SAE 5W-30 / ILSAC GF-7				
Number of Cylinders/Rotors	4	Mechanically Variable Compression Ratio Indicator	N				

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Test Group		TFMXT02.36HG			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		Platinum + Palladium + Rhodium		Ceramic		Monolith															
Mfr After Treatment Device (ATD) Comments		TWC																					
Direct Ozone Reduction (DOR) Device		Not Equipped																					
Mfr Emission Control Device Comments		--																					
Engine Configuration Number 1																							
Engine Displacement (liters)		2.3			Engine Rated Horsepower		300																
Number of Inlet Valves Per Cylinder		2			Number of Exhaust Valves Per Cylinder		2																
Air Aspiration Method		Turbocharged			Number of Air Aspiration Devices		1																
Air Aspiration Device Configuration		Single			Charge Air Cooler Type		Air																
Air Aspiration Drive Method(s)		Mechanical																					
Cylinder Deactivation		No																					
Cylinder Deactivation Description		--																					
Variable Valve Timing		Yes																					
Variable Valve Timing System Description		TIVCT																					
Variable Valve Lift?		No																					
Variable Valve Lift System Description		--																					
Number of Knock Sensors		2			Number of Air/Fuel Sensors		2																
Air/Fuel Sensor # 1 Type		Heated air fuel			Air/Fuel Sensor # 1 Description		WR-HO2S																
Air/Fuel Sensor # 2 Type		Heated oxygen			Air/Fuel Sensor # 2 Description		HO2S																
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		--																					
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		SFMX91006062		SFMX91006063		SFMX10087706		SFMX10087705		SFMX91006064		85.7		228.2		999.9		286.1		1			

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Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
SFTP LEV-III Official Test Numbers			
Test Group Fuel	FTP	US06	SC03
Gasoline	SFMX91006062	SFMX91006063	SFMX10087706

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Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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
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Leak Family Details

Leak Family Identifier	001	Leak Family Name	NFMXR0140NDG-001
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Drive Sources and Fuel System Details

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

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
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 equipped	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:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	44.07	0.6921	0.04663	20.96	0.5259	0.04582	26

Emission Control Device Comments 22MY BETP

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Test Group	TFMXT02.36HG	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	0.02	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0151	0	0.015	0.02	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
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

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Test Group	TFMXT02.36HG	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	--

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Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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	0.338	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.3375	0	0.338	0.5	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	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	0.373	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.3726	0	0.373	0.5	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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	0.1	0.2	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.098	0.002	0.1	0.2	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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	0	0	0.05	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0	0	0	0.05	Pass

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Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Emission Data Vehicle Information

Vehicle ID / Configuration	SRD1-2.3-J-054 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SFMXT02.36HG	Original Evaporative/Refueling Family	SFMXR0140NDG
Original Test Vehicle Model Year	2025		

Vehicle Model

Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	RANGER 4WD
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Leak Family Details

Leak Family Identifier	001	Leak Family Name	SFMXR0140NDG-001
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Drive Sources and Fuel System Details

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

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
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	STRDN3NA92	Rated Horsepower	300
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 equipped	Aged Emission Components	150,000 (mi)
Curb Weight (lbs)	4481	Equivalent Test Weight (pounds)	4750
GVWR (lbs)	6170	N/V Ratio	26.5
Axle Ratio	3.73		
Transmission Type	Automatic	# of Transmission Gears	10
Transmission Lockup	Yes	Creeper Gear	No

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Test Group		TFMXT02.36HG			Evaporative/Refueling Family			TFMXR0140NDG
Dynamometer Coefficients:								
		Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	36.46	0.1423	0.03379	16.73	0.1347	0.03113	17.1	
Cold CO	36.46	0.1423	0.03379	16.73	0.1347	0.03113	N/A	
US06	36.46	0.1423	0.03379	16.73	0.1347	0.03113	N/A	
Emission Control Device Comments	T3B30/SULEV30							
Manufacturer Test Vehicle Comments	2.3L Ford Ranger							

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Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX10087676	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	26 - Cold CO Regular (Tier 2)
Test Date	08/16/2024	Fuel	Gasoline
Fuel Batch ID	307B	Fuel Calibration Number	18
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	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4009	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)	543.590027	--
FE BAG 1 (Bag 1 Fuel Economy)	15.95165	15.95165
CO2 BAG 2 (Bag 2 Carbon Dioxide)	448.968994	--
FE BAG 2 (Bag 2 Fuel Economy)	19.564471	19.564471
CO2 BAG 3 (Bag 3 Carbon Dioxide)	401.61499	--
FE BAG 3 (Bag 3 Fuel Economy)	21.834361	21.834361
METHANE (CH4 - Methane)	0.011398	--
CO (Carbon Monoxide)	0.883442	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.051434	--
DT-EER (Drive Trace Energy Economy Rating)	-0.428878	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.062979	--
MFR FE (Manufacturer Fuel Economy)	19.2	19.2
NOX (Nitrogen Oxide)	0.01715	--
NMOG (Non-methane organic gases)	0.032778	--
HC-TOTAL (Total Hydrocarbon)	0.043026	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	458	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	455.6	--

Manufacturer Test Comments --

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Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 30	CO	0.88	--	--	--	--	--	0.9	12.5	Pass
CA	50,000 miles	California LEV-III SULEV30	CO	0.88	--	--	--	--	--	0.9	12.5	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX10087705	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	08/11/2024	Fuel	Gasoline
Fuel Batch ID	375-B	Fuel Calibration Number	56
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	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3928	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)	527.187848	--
FE BAG 1 (Bag 1 Fuel Economy)	16.129818	16.129818
CO2 BAG 2 (Bag 2 Carbon Dioxide)	443.405504	--
FE BAG 2 (Bag 2 Fuel Economy)	19.451516	19.451516
CO2 BAG 3 (Bag 3 Carbon Dioxide)	392.919345	--
FE BAG 3 (Bag 3 Fuel Economy)	21.924953	21.924953
METHANE (CH4 - Methane)	0.011741	--
CO (Carbon Monoxide)	0.908097	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.868634	--
DT-EER (Drive Trace Energy Economy Rating)	0.02286	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.19047	--
MFR FE (Manufacturer Fuel Economy)	19.2	19.2
NOX (Nitrogen Oxide)	0.01842	--
NMOG (Non-methane organic gases)	0.047802	--
HC-TOTAL (Total Hydrocarbon)	0.055415	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	449	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	446.9	--

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 30	CO	0.91	--	--	--	--	--	0.9	12.5	Pass
CA	50,000 miles	California LEV-III SULEV30	CO	0.91	--	--	--	--	--	0.9	12.5	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006062	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	10/02/2024	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	4102	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)	414.5887146	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	384.1575623	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	370.5146484	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0070995	--
CO (Carbon Monoxide)	0.4295848	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.3510667	--
DT-EER (Drive Trace Energy Economy Rating)	-0.3952667	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.8901581	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0083612	--
N2O (Nitrous Oxide)	0.0013457	--
HC-NM (Non-methane Hydrocarbon)	0.0160305	--
NMOG (Non-methane organic gases)	0.0176073	--
PM (Particulate Matter)	0.0004024	--
HC-TOTAL (Total Hydrocarbon)	0.0229974	--

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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	386.7246399	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 3, FE BAG 2, FE BAG 1, 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 30	CO	0.43	--	--	--	--	--	0.4	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.36	--	--	--	--	--	0.4	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0071	--	--	--	--	--	0.007	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0013	--	--	--	--	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0176	--	1.1	--	--	--	0.018	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.026	--	--	--	--	--	0.026	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0177	--	--	--	--	--	0.018	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0084	--	--	--	--	--	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0004	--	--	--	--	--	0	0.003	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.43	--	--	--	--	--	0.4	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	CO-COMP	0.36	--	--	--	--	--	0.4	4.2	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0176	--	1.1	--	--	--	0.018	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.026	--	--	--	--	--	0.026	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX-COMP	0.0177	--	--	--	--	--	0.018	0.050	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0084	--	--	--	--	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0004	--	--	--	--	--	0	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	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006080	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	10/09/2024	Fuel	Gasoline
Fuel Batch ID	29351	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	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)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	422.618103	--
FE BAG 1 (Bag 1 Fuel Economy)	20.9685726	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	387.9432678	--
FE BAG 2 (Bag 2 Fuel Economy)	22.9718781	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	371.3951721	--
FE BAG 3 (Bag 3 Fuel Economy)	23.9864521	--
METHANE (CH4 - Methane)	0.0108416	--
CO (Carbon Monoxide)	0.3260122	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.608497	--
DT-EER (Drive Trace Energy Economy Rating)	0.0092695	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.0686285	--
MFR FE (Manufacturer Fuel Economy)	22.7845821	--
NOX (Nitrogen Oxide)	0.0078765	--
N2O (Nitrous Oxide)	0.0048766	--
HC-NM (Non-methane Hydrocarbon)	0.0064676	--
NMOG (Non-methane organic gases)	0.0067264	--
HC-TOTAL (Total Hydrocarbon)	0.0170637	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	392

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	390.598114	--

Manufacturer Test Comments None

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.33	--	--	--	--	--	0.3	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CREE	392	--	--	--	0	--	392	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	METHANE	0.0108	--	--	--	--	--	0.011	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	N2O	0.0049	--	--	--	--	--	0.005	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0067	--	1.1	--	--	--	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0146	--	--	--	--	--	0.015	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0079	--	--	--	--	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	CO	0.33	--	--	--	--	--	0.3	1.0	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0067	--	1.1	--	--	--	0.007	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0146	--	--	--	--	--	0.015	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0079	--	--	--	--	--	0.008	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	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006064	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	10/02/2024	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	4113	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)	0.0026726	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.3866034	--
DT-EER (Drive Trace Energy Economy Rating)	-0.2447655	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.099103	--
MFR FE (Manufacturer Fuel Economy)	31.1454926	--
NOX (Nitrogen Oxide)	0.001351	--
N2O (Nitrous Oxide)	0.0003421	--
HC-NM (Non-methane Hydrocarbon)	0.0002313	--
NMOG (Non-methane organic gases)	0.0002382	--
HC-TOTAL (Total Hydrocarbon)	0.0028665	--

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	278.4126282	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group		TFMXT02.36HG				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 30	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0002	--	1.03	--	--	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0016	--	--	--	--	--	0.002	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0014	--	--	--	--	--	0.001	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0002	--	1.03	--	--	--	0	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0016	--	--	--	--	--	0.002	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0014	--	--	--	--	--	0.001	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	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006081	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	10/09/2024	Fuel	Gasoline
Fuel Batch ID	29351	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4205	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)	0.0107075	--
CO (Carbon Monoxide)	0.3996584	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	10.5846109	--
DT-EER (Drive Trace Energy Economy Rating)	0.4584714	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	13.4687233	--
MFR FE (Manufacturer Fuel Economy)	31.1956367	--
NOX (Nitrogen Oxide)	0.0143119	--
N2O (Nitrous Oxide)	0.0092585	--
HC-NM (Non-methane Hydrocarbon)	0.0114436	--
NMOG (Non-methane organic gases)	0.0119013	--
HC-TOTAL (Total Hydrocarbon)	0.0219086	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	286

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	285.0001221	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group		TFMXT02.36HG				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 30	CREE	286	--	--	--	0	--	286	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0119	--	1.03	--	--	--	0.012	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0262	--	--	--	--	--	0.026	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0143	--	--	--	--	--	0.014	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0119	--	1.03	--	--	--	0.012	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG+NOX	0.0262	--	--	--	--	--	0.026	0.030	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0143	--	--	--	--	--	0.014	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	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006063	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	10/02/2024	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	4137	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)	633.7241211	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	361.605011	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0057424	--
CO (Carbon Monoxide)	0.6255289	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-3.1262057	--
DT-EER (Drive Trace Energy Economy Rating)	-2.3100097	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-5.0537472	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0180568	--
N2O (Nitrous Oxide)	0.0036671	--
HC-NM (Non-methane Hydrocarbon)	0.0081661	--
NMOG (Non-methane organic gases)	0.0084111	--
PM (Particulate Matter)	0.0004107	--
HC-TOTAL (Total Hydrocarbon)	0.0138282	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	422.4621277	--

Manufacturer Test Comments

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

Certification Summary Information Report

Test Group		TFMXT02.36HG				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 30	PM	0.0004	--	--	--	--	--	0	0.006	Pass
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0084	--	1.03	--	--	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0181	--	--	--	--	--	0.018	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	PM	0.0004	--	--	--	--	--	0	0.006	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX91006082	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	10/09/2024	Fuel	Gasoline
Fuel Batch ID	29351	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4229	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)	646.1895752	--
FE BAG 1 (Bag 1 Fuel Economy)	13.7436714	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	367.848938	--
FE BAG 2 (Bag 2 Fuel Economy)	24.1643066	--
METHANE (CH4 - Methane)	0.0083435	--
CO (Carbon Monoxide)	0.7699962	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.5881769	--
DT-EER (Drive Trace Energy Economy Rating)	-0.7723566	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.6961858	--
MFR FE (Manufacturer Fuel Economy)	20.6696301	--
NOX (Nitrogen Oxide)	0.0377308	--
N2O (Nitrous Oxide)	0.0069263	--
HC-NM (Non-methane Hydrocarbon)	0.0118436	--
NMOG (Non-methane organic gases)	0.0123174	--
HC-TOTAL (Total Hydrocarbon)	0.0199982	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	429.915741	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California LEV-III SULEV30	NMOG	0.0123	--	1.03	--	--	--	0.012	999.999	Pass
CA	150,000 miles	California LEV-III SULEV30	NOX	0.0377	--	--	--	--	--	0.038	999.999	Pass

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Test #	SFMX10087677	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/14/2024	Fuel	N/A
Fuel Batch ID	CERT_5	Fuel Calibration Number	172
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	3995	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)	417.923004	--
FE BAG 1 (Bag 1 Fuel Economy)	21.266295	21.266295
CO2 BAG 2 (Bag 2 Carbon Dioxide)	417.923004	--
FE BAG 2 (Bag 2 Fuel Economy)	21.266295	21.266295
METHANE (CH4 - Methane)	0.006529	--
CO (Carbon Monoxide)	0.181092	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.239054	--
DT-EER (Drive Trace Energy Economy Rating)	-0.035494	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.523862	--
MFR FE (Manufacturer Fuel Economy)	21.3	21.3
NOX (Nitrogen Oxide)	0.002242	--
NMOG (Non-methane organic gases)	0.001601	--
HC-TOTAL (Total Hydrocarbon)	0.008132	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	418	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	417.9	--

Manufacturer Test Comments --

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG																																	
Test #	SFMX10087706	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	08/02/2024	Fuel	N/A																																	
Fuel Batch ID	373-B	Fuel Calibration Number	91																																	
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	3903	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																																				
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>METHANE (CH4 - Methane)</td> <td>0.005494</td> <td>--</td> </tr> <tr> <td>CO (Carbon Monoxide)</td> <td>0.080777</td> <td>--</td> </tr> <tr> <td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td> <td>-0.381783</td> <td>--</td> </tr> <tr> <td>DT-EER (Drive Trace Energy Economy Rating)</td> <td>-0.378521</td> <td>--</td> </tr> <tr> <td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td> <td>-0.708629</td> <td>--</td> </tr> <tr> <td>MFR FE (Manufacturer Fuel Economy)</td> <td>18.519889</td> <td>18.519889</td> </tr> <tr> <td>NOX (Nitrogen Oxide)</td> <td>0.002858</td> <td>--</td> </tr> <tr> <td>HC-NM (Non-methane Hydrocarbon)</td> <td>0.000292</td> <td>--</td> </tr> <tr> <td>NMOG (Non-methane organic gases)</td> <td>0.000301</td> <td>--</td> </tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.006171</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	METHANE (CH4 - Methane)	0.005494	--	CO (Carbon Monoxide)	0.080777	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.381783	--	DT-EER (Drive Trace Energy Economy Rating)	-0.378521	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.708629	--	MFR FE (Manufacturer Fuel Economy)	18.519889	18.519889	NOX (Nitrogen Oxide)	0.002858	--	HC-NM (Non-methane Hydrocarbon)	0.000292	--	NMOG (Non-methane organic gases)	0.000301	--	HC-TOTAL (Total Hydrocarbon)	0.006171	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																		
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Test Result Name	Unrounded Test Result	Verify Calculated CO2																																		
Carbon dioxide	471	--																																		
Manufacturer Test Comments	--																																			

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
Fuel Properties			
Fuel Batch ID	373-B	Fuel Calibration Number	91
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/25/2024
Fuel Batch Calibration Effective Date	07/25/2024	Fuel Batch Calibration Ineffective Date	12/31/2100
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	9.6	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17869
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--
Fuel Batch ID	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	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
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	--
Fuel Batch ID	29351	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	05/03/2023
Fuel Batch Calibration Effective Date	05/03/2023	Fuel Batch Calibration Ineffective Date	--

Certification Summary Information Report

Test Group	TFMXT02.36HG	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	0.742
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18439
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.867	Weight Fraction CO2	--
Fuel Batch ID	307B	Fuel Calibration Number	18
Test Fuel Type	26 - Cold CO Regular (Tier 2)	Fuel Batch Calibration Date	03/31/2023
Fuel Batch Calibration Effective Date	03/31/2023	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	0.734
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18678
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.865	Weight Fraction CO2	--
Fuel Batch ID	CERT_5	Fuel Calibration Number	172
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	07/30/2024
Fuel Batch Calibration Effective Date	07/30/2024	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	0.748
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18524
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.865	Weight Fraction CO2	--
Fuel Batch ID	375-B	Fuel Calibration Number	56
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	07/25/2024
Fuel Batch Calibration Effective Date	07/25/2024	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	0.742
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18020
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	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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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 SULEV30
Fuel	Gasoline	Test Procedure	HWFE

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030
150,000 miles	NOX	--	--	--	--	--	--	--	999.999

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 SULEV30
Fuel	Gasoline	Test Procedure	Federal fuel 2-day exhaust (w/can load)

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	--	1.0
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	--	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	PM	--	--	--	--	--	--	--	0.003

Certification Summary Information Report

Test Group		TFMXT02.36HG			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 30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	--	1.0
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	METHANE	--	--	--	--	--	--	--	0.030
150,000 miles	N2O	--	--	--	--	--	--	--	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	--	0.003

Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			HWFE	

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group		TFMXT02.36HG			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 30		
Fuel		Gasoline			Test Procedure			Cold CO		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	CO	--	--	--	--	--	--	--	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	--	0.3	
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 30		
Fuel		Gasoline			Test Procedure			US06		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	PM	--	--	--	--	--	--	--	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 SULEV30		
Fuel		Gasoline			Test Procedure			US06		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999	
150,000 miles	NOX	--	--	--	--	--	--	--	999.999	
150,000 miles	PM	--	--	--	--	--	--	--	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 SULEV30		
Fuel		Gasoline			Test Procedure			Cold CO		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
50,000 miles	CO	--	--	--	--	--	--	--	12.5	

Certification Summary Information Report

Test Group	TFMXT02.36HG	Evaporative/Refueling Family	TFMXR0140NDG
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Evaporative/Refueling Standards

Evaporative/Refueling Family	TFMXR0140NDG	Cert Region	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
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	TFMXR0140NDG	Cert Region	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
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	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	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

Evaporative/Refueling Family	TFMXR0140NDG	Cert Region	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
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

Certification Summary Information Report

Test Group	TFMXT02.36HG	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 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	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
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	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
Evaporative/Refueling Family	TFMXR0140NDG	Cert Region	California + CAA Section 177 states California LEV-III Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
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	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

Certification Summary Information Report

Test Group	TFMXT02.36HG	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	TFMXT02.36HG	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		TFMXT02.36HG	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	