

Certification Summary Information Report

Manufacturer	Ford Motor Company	Manufacturer Code	FMX
Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Certificate Number	VFMXT03.57AT-002	CARB Executive Order #	--
Certificate Issue Date	05/14/2026	Certificate Revision Date	--
Certificate Effective Date	05/14/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	05/14/2026 08:38:03 AM
Model Year	2027		

Test Group Information

CSI Type	Update for Correction	Running Change Reference Number	--
GHG Exempt Status	Not Exempt		

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Gasoline	Spark Ignition direct & ported injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	No
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	No
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VFMXGPGNNE1C	Durability Group Equivalency Factor	1.0
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	07/20/2026	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	VFMXT03.57AV
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	2
OBD Deficiencies Comments	--		
Mfr Test Group Comments	E10 City Litmus Value = 12.5 mpg, City Litmus Threshold = 12.4 mpg, E10 HWY Litmus Value = 14.4 mpg, HWY Litmus Threshold = 14.3 mpg Confirmatory tested at EPA. EPA US06 test is RFMX91005595. PM for US06 IS from APTL test RFMX10082173: RESULT = 1.0 MG/MILE VS. 6 MG/MILE standard.		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Evaporative/Refueling Family Information			
Evaporative Summary Information Type	Update for Correction	Submission/Correction Date	01/22/2026 07:45:24 AM
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	1 X 3.7L HA 3-port Rect. + 3 X 0.048L Bleed
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	260	Number of Primary Canisters	1
Number of Bleed Canisters	3	Bleed Canister Total Working Capacity (grams)	1
Mfr Evaporative/Refueling Family Comments	F-150/Expedition/Navigator Large tank. Vehicle Lines Covered; 5.0L PFDI F-150, 5.2L SC F-150 Raptor R, 3.5L GTPFDI Expedition MAX, 3.5L GTPFDI Navigator L		
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
VFMXR0260NDV-001	50 State	0.02	VFMXR0260NDV-001

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
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	241 - EXPEDITION 4WD	Federal
Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	2 - Lincoln	115 - NAVIGATOR 2WD	California + CAA Section 177 states
2-Wheel Drive, Rear	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	240 - EXPEDITION 2WD	California + CAA Section 177 states
2-Wheel Drive, Rear	Semi-Automatic	10	Yes
Ford Motor Company	2 - Lincoln	116 - NAVIGATOR 4WD	California + CAA Section 177 states
Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	2 - Lincoln	115 - NAVIGATOR 2WD	Federal
2-Wheel Drive, Rear	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	241 - EXPEDITION 4WD	California + CAA Section 177 states
Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	2 - Lincoln	116 - NAVIGATOR 4WD	Federal
Part-time 4-Wheel Drive	Semi-Automatic	10	Yes
Ford Motor Company	1 - Ford	240 - EXPEDITION 2WD	Federal
2-Wheel Drive, Rear	Semi-Automatic	10	Yes

Engine Description	
Hybrid Type	--
Engine Type	4-Stroke Spark Ignition
Engine Block Arrangement	V-shaped engine
Camless Valvetrain Indicator	No
Number of Cylinders/Rotors	6
Hybrid Description	--
Mfr Engine Description	--
Mfr Engine Block Arrangement Description	--
Oil Viscosity/Classification	SAE 5W-30 API SP ILSACGF7
Mechanically Variable Compression Ratio Indicator	N

After Treatment Device(s) (ATD)				
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic	Monolith
2	Three-way catalyst	Platinum + Rhodium	Ceramic	Monolith
3	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic	Monolith
4	Three-way catalyst	Platinum + Rhodium	Ceramic	Monolith

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

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Engine Configuration Number 1			
Engine Displacement (liters)	3.5	Engine Rated Horsepower	440
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	TiVCT		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	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	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	Navigator / Expedition (High Output) (98 RON Ratings)		

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV								
Engine Configuration Number 2											
Engine Displacement (liters)	3.5	Engine Rated Horsepower	400								
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2								
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2								
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air								
Air Aspiration Drive Method(s)	Mechanical										
Cylinder Deactivation	No										
Cylinder Deactivation Description	--										
Variable Valve Timing	Yes										
Variable Valve Timing System Description	TiVCT										
Variable Valve Lift?	No										
Variable Valve Lift System Description	--										
Number of Knock Sensors	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	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	Expedition (91 RON Ratings)										
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		RFMX91005597	RFMX91005595	RFMX10082154	RFMX10082174	RFMX91005596	61.9	228.2	999.9	286.1	--
SFTP LEV-III Official Test Numbers											
Test Group	Fuel	FTP	US06	SC03							
Gasoline		RFMX91005597	RFMX91005595	RFMX10082154							

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Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV						
Emission Data Vehicle Information									
Vehicle ID / Configuration	JFC1-5.0-J-029 / 0	Manufacturer Vehicle Configuration Number	1						
Original Test Group Name	JFMXT05.03DN	Original Evaporative/Refueling Family	JFMXR0260NDG						
Original Test Vehicle Model Year	2018								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 Super Cab 4X4						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	JFMXR0260NDG-001						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	JTFCAVNC05	Rated Horsepower	395						
Displacement (liters)	5								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5217	Equivalent Test Weight (pounds)	5500						
GVWR (lbs)	7850	N/V Ratio	25.7						
Axle Ratio	3.73								
Transmission Type	Semi-Automatic	# of Transmission Gears	10						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family		VFMXR0260NDV	
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	44.39	0.1933	0.03931	26.94	0.1117	0.0368	20.3	
Cold CO	44.39	0.1933	0.03931	26.94	0.1117	0.0368	N/A	
US06	44.39	0.1933	0.03931	26.94	0.1117	0.0368	N/A	
Emission Control Device Comments		Test Request t18-0006-01; T3B125 / ULEV125						
Manufacturer Test Vehicle Comments		2018MY F150 Super Cab 4x4						

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	JFMX10048057	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	03/04/2017	Fuel	N/A
Fuel Batch ID	373-B	Fuel Calibration Number	13
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4867	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	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	593.7469258	--
FE BAG 1 (Bag 1 Fuel Economy)	14.4883336	14.4883336
CO2 BAG 2 (Bag 2 Carbon Dioxide)	588.179163	--
FE BAG 2 (Bag 2 Fuel Economy)	14.748881	14.748881
CO2 BAG 3 (Bag 3 Carbon Dioxide)	515.8187807	--
FE BAG 3 (Bag 3 Fuel Economy)	16.7965514	16.7965514
METHANE (CH4 - Methane)	0.008781	--
CO (Carbon Monoxide)	0.7106258	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.3945	--
DT-EER (Drive Trace Energy Economy Rating)	1.18092	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.84808	--
HCHO (Formaldehyde)	0.0011057	--
MFR FE (Manufacturer Fuel Economy)	15.2136817	15.2136817
NOX (Nitrogen Oxide)	0.024514	--
N2O (Nitrous Oxide)	0.0017543	--
HC-NM (Non-methane Hydrocarbon)	0.0261758	--
NMOG (Non-methane organic gases)	0.0288016	--
PM (Particulate Matter)	0.000822	--
HC-TOTAL (Total Hydrocarbon)	0.0339089	--

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Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CREE/OPT-CREE</td></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>570</td><td>999</td></tr><tr><td>Optional Carbon-Related Exhaust Emissions</td><td>571</td><td>999</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	570	999	Optional Carbon-Related Exhaust Emissions	571	999		
	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE									
	Carbon-Related Exhaust Emissions	570	999									
	Optional Carbon-Related Exhaust Emissions	571	999									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CO2</td></tr><tr><td>Carbon dioxide</td><td>569.4484674</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	569.4484674	--					
Test Result Name	Unrounded Test Result	Verify Calculated CO2										
Carbon dioxide	569.4484674	--										
Manufacturer Test Comments	NMOG = 1.1 * NMHC _r											

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
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Emission Data Vehicle Information

Vehicle ID / Configuration	JFC1-5.0-J-029 / 1	Manufacturer Vehicle Configuration Number	1
Original Test Group Name	JFMXT05.03DP	Original Evaporative/Refueling Family	JFMXR0260NDV
Original Test Vehicle Model Year	2018		

Vehicle Model

Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 Super Cab 4X4
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Leak Family Details

Leak Family Identifier	001	Leak Family Name	JFMXR0260NDV-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	JTFCAVNC06	Rated Horsepower	395
Displacement (liters)	5	Air Aspiration Method, if 'Other'	
Air Aspiration Method	Naturally Aspirated	Air Aspiration Device Configuration	--
Number of Air Aspiration Devices	--	Drive Mode While Testing	2-Wheel Drive, Rear
Charge Air Cooler Type	N/A	Aged Emission Components	4,000 (mi)
Shift Indicator Light Usage	Not equipped	Equivalent Test Weight (pounds)	5500
Curb Weight (lbs)	5217	N/V Ratio	25.7
GVWR (lbs)	7850		
Axle Ratio	3.73		
Transmission Type	Semi-Automatic	# of Transmission Gears	10
Transmission Lockup	Yes	Creeper Gear	No

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	44.39	0.1933	0.03931	26.94	0.1117	0.0368	20.3

Emission Control Device Comments

Test Request t18-0047-01; T3/L3 Evap Gasoline

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV									
Manufacturer Test Vehicle Comments	2018MY F150 Super Cab 4x4											
Test #	JFMX10049672	Test Procedure	23 - 2-day evap									
Exhaust Test # for this Evap Test	JFMX10048057	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)									
Test Date	05/09/2017	Fuel	Gasoline									
Fuel Batch ID	--	Fuel Calibration Number	--									
Vehicle Class	N/A	DF Type	Mfr. Determined									
Verify Test Lab ID	APTL											
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)											
Test Start Odometer Reading	5337	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	No									
Test Results												
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>OMHCE (Organic material Hydrocarbon Equivalent)</td> <td>0.1981</td> <td>--</td> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.1981</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	OMHCE (Organic material Hydrocarbon Equivalent)	0.1981	--	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.1981	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.1981	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.1981	--										
Manufacturer Test Comments												
Linking test performed on previously waived calibration R05 for test group JFMXT05.03DN												
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	0.1981	0	0.198	0.5	Pass				
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.1981	0	0.198	0.5	Pass				

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	JFMX10049673	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	JFMX10048057	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	04/28/2017	Fuel	Gasoline
Fuel Batch ID	--	Fuel Calibration Number	--
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	5273	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	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
OMHCE (Organic material Hydrocarbon Equivalent)	0.2212	--
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2212	--

Manufacturer Test Comments

Linking test performed on previously waived calibration (R05) level for JFMXT05.03DN.

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	0.2212	0	0.221	0.5	Pass
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.2212	0	0.221	0.5	Pass

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV									
Test #	JFMX10049674	Test Procedure	32 - Federal Fuel Running Loss									
Exhaust Test # for this Evap Test	JFMX10048057	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)									
Test Date	04/28/2017	Fuel	Gasoline									
Fuel Batch ID	--	Fuel Calibration Number	--									
Vehicle Class	N/A	DF Type	Mfr. Determined									
Verify Test Lab ID	APTL											
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)											
Test Start Odometer Reading	5284	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	No									
Test Results												
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>OMHCE (Organic material Hydrocarbon Equivalent)</td> <td>0.001</td> <td>--</td> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.001</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	OMHCE (Organic material Hydrocarbon Equivalent)	0.001	--	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.001	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.001	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.001	--										
Manufacturer Test Comments												
Linking test performed on previously waived												
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail				
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.001	0	0	0.05	Pass				
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.001	0	0	0.05	Pass				

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV					
Emission Data Vehicle Information								
Vehicle ID / Configuration	JFC1-5.0-J-029 / 2	Manufacturer Vehicle Configuration Number	2					
Original Test Group Name	JFMXT05.03DP	Original Evaporative/Refueling Family	JFMXR0260NDV					
Original Test Vehicle Model Year	2018							
Vehicle Model								
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 Super Cab 4X4					
Leak Family Details								
Leak Family Identifier	001	Leak Family Name	JFMXR0260NDV-001					
Drive Sources and Fuel System Details								
	<table border="1"> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> <tr> <td>1</td> <td>Combustion Engine</td> <td>Ethanol, Gasoline</td> </tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Ethanol, Gasoline	
Drive Source and Fuel#	Drive Source	Fuel						
1	Combustion Engine	Ethanol, Gasoline						
Hybrid Indicator	No							
Multiple Fuel Storage	Fuels Stored Together	Multiple Fuel Combustion	Fuels Combusted Together					
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	JTFCAVNC21	Rated Horsepower	395					
Displacement (liters)	5							
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'						
Number of Air Aspiration Devices	--	Air Aspiration Device Configuration	--					
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear					
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)					
Curb Weight (lbs)	5217	Equivalent Test Weight (pounds)	5500					
GVWR (lbs)	7850	N/V Ratio	25.7					
Axle Ratio	3.73							
Transmission Type	Semi-Automatic	# of Transmission Gears	10					
Transmission Lockup	Yes	Creep Gear	No					
Dynamometer Coefficients:								
	Target Coefficients		Set Coefficients					
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)					
City/Highway/Evap	44.39	0.1933	0.03931					
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)					
	26.94	0.1117	0.0368					
	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients							
	20.3							
Emission Control Device Comments	Test Request t18-0006-01; T3B125 / ULEV125							

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV									
Manufacturer Test Vehicle Comments	2018MY F150 Super Cab 4x4											
Test #	JFMX10049676	Test Procedure	24 - Federal fuel refueling test (ORVR)									
Exhaust Test # for this Evap Test	JFMX10048057	Test Fuel Type	59 - Tier 3 E10 Premium Gasoline (10 RVP-FFV ORVR Only)									
Test Date	06/20/2017	Fuel	Gasoline									
Fuel Batch ID	--	Fuel Calibration Number	--									
Vehicle Class	N/A	DF Type	Mfr. Determined									
Verify Test Lab ID	APTL											
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)											
Test Start Odometer Reading	5422	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	No									
Test Results												
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> </thead> <tbody> <tr> <td>OMHCE (Organic material Hydrocarbon Equivalent)</td> <td>0.008</td> <td>--</td> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.008</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	OMHCE (Organic material Hydrocarbon Equivalent)	0.008	--	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.008	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)										
OMHCE (Organic material Hydrocarbon Equivalent)	0.008	--										
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.008	--										
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	0.008	0.003	0.01	0.2	Pass				
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	OMHCE	0.008	0.003	0.01	0.2	Pass				

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV						
Test #	JFMX10049769	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	04/06/2017	Fuel	Gasoline						
Fuel Batch ID	--	Fuel Calibration Number	--						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	APTL								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	5111	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	No						
Test Results									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL (Total Hydrocarbon)</td> <td>0.0107</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL (Total Hydrocarbon)	0.0107	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL (Total Hydrocarbon)	0.0107	--							
Manufacturer Test Comments									
BETP Testing is THC Only (not OMHCE/THCE)									
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	0.0107	0	0.011	0.02	Pass	
CA	150,000 miles	California LEV-III Zero Evap (Option 2)	HC-TOTAL	0.0107	0	0.011	0.02	Pass	

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV						
Emission Data Vehicle Information									
Vehicle ID / Configuration	RFD1-3.5-J-850 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	RFMXT03.57AT	Original Evaporative/Refueling Family	RFMXR0260NDG						
Original Test Vehicle Model Year	2024								
Vehicle Model									
Represented Test Vehicle Make	Ford	Represented Test Vehicle Model	F150 RAPTOR 4WD						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	RFMXR0260NDG-001						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.03						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	RTFDBMNR01	Rated Horsepower	450						
Displacement (liters)	3.5								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	150,000 (mi)						
Curb Weight (lbs)	6023	Equivalent Test Weight (pounds)	6500						
GVWR (lbs)	7400	N/V Ratio	24.6						
Axle Ratio	4.1								
Transmission Type	Semi-Automatic	# of Transmission Gears	10						
Transmission Lockup	Yes	Creep Gear	No						

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family		VFMXR0260NDV	
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	50.64	0.4139	0.04767	23.06	0.3191	0.04551	25.4	
Cold CO	50.64	0.4139	0.04767	23.06	0.3191	0.04551	N/A	
US06	50.64	0.4139	0.04767	23.06	0.3191	0.04551	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		F150 RAPTOR (P702) 3.5L GTPFDI 4X4						

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	RFMX10082174	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)
Test Date	06/09/2023	Fuel	Gasoline
Fuel Batch ID	375-B	Fuel Calibration Number	48
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	APTL		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3936	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	774.49131	--
FE BAG 1 (Bag 1 Fuel Economy)	11.13547	11.13547
CO2 BAG 2 (Bag 2 Carbon Dioxide)	603.96328	--
FE BAG 2 (Bag 2 Fuel Economy)	14.33276	14.33276
CO2 BAG 3 (Bag 3 Carbon Dioxide)	579.32183	--
FE BAG 3 (Bag 3 Fuel Economy)	14.94799	14.94799
METHANE (CH4 - Methane)	0.01401	--
CO (Carbon Monoxide)	0.36086	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.7396	--
DT-EER (Drive Trace Energy Economy Rating)	0.0441	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.4004	--
MFR FE (Manufacturer Fuel Economy)	13.7	13.7
NOX (Nitrogen Oxide)	0.036659	--
N2O (Nitrous Oxide)	0.01	--
HC-NM (Non-methane Hydrocarbon)	0.0881	--
NMOG (Non-methane organic gases)	0.09162	--
HC-TOTAL (Total Hydrocarbon)	0.10281	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	633.8776	--
Optional Carbon-Related Exhaust Emissions	637.1624	--

Certification Summary Information Report

Test Group		VFMXT03.57AT				Evaporative/Refueling Family				VFMXR0260NDV			
		Test Result Name		Unrounded Test Result			Verify Calculated CO2						
		Carbon dioxide		632.5307			--						
Manufacturer Test Comments		SPORT MODE WITH START STOP ACTIVE											
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	0.36	--	--	--	0	--	0.4	12.5	Pass	
Fed	120,000 miles	Federal Tier 3 Bin 50	HC-NM	0.09	--	--	--	0	--	0.1	0.4	Pass	
CA	50,000 miles	California LEV-III ULEV50	CO	0.36	--	--	--	--	--	0.4	12.5	Pass	

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	RFMX91005597	Test Procedure	21 - Federal fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	08/29/2023	Fuel	Gasoline
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4056	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)	621.9162598	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	535.137146	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	521.0828247	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0054263	--
CO (Carbon Monoxide)	0.1378368	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.2492224	--
DT-EER (Drive Trace Energy Economy Rating)	-0.126445	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.2801158	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0056335	--
N2O (Nitrous Oxide)	0.0013227	--
HC-NM (Non-methane Hydrocarbon)	0.0113492	--
NMOG (Non-methane organic gases)	0.0124655	--
PM (Particulate Matter)	0.0007157	--
HC-TOTAL (Total Hydrocarbon)	0.016566	--

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family				VFMXR0260NDV			
		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		549.2374878			--					
Manufacturer Test Comments		None Unrounded Result for the following test results were modified by Verify: MFR FE, FE BAG 1, FE BAG 2, FE BAG 3										
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	0.14	--	--	--	0	--	0.1	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.16	--	--	--	0	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	METHANE	0.0054	--	--	--	0	--	0.005	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	N2O	0.0013	--	--	--	0	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0125	--	1.1	--	0	--	0.012	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0181	--	--	--	--	--	0.018	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.0174	--	--	--	0	--	0.017	0.060	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0056	--	--	--	0	--	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0007	--	--	--	0	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-III ULEV50	CO	0.14	--	--	--	--	--	0.1	1.7	Pass
CA	150,000 miles	California LEV-III ULEV50	CO-COMP	0.16	--	--	--	--	--	0.2	4.2	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0125	--	1.1	--	--	--	0.012	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0181	--	--	--	--	--	0.018	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX-COMP	0.0174	--	--	--	--	--	0.017	0.060	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0056	--	--	--	--	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	PM	0.0007	--	--	--	--	--	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	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV																																				
Test #	RFMX91005596	Test Procedure	3 - HWFE																																				
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)																																				
Test Date	08/29/2023	Fuel	Gasoline																																				
Fuel Batch ID	28637	Fuel Calibration Number	1																																				
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined																																				
Verify Test Lab ID	--																																						
E10 Evaporative Test Measurement Method	--																																						
Test Start Odometer Reading	4067	Odometer Units	M																																				
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--																																				
State of Charge Delta	--																																						
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes																																				
Test Results																																							
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Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																					
METHANE (CH4 - Methane)	0.0043736	--																																					
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Carbon-Related Exhaust Emissions	9999.9999999	999																																					
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Test Result Name	Unrounded Test Result	Verify Calculated CO2																																					
Carbon dioxide	422.7353821	--																																					
Manufacturer Test Comments	None																																						

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family					VFMXR0260NDV		
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	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0074	--	1.03	--	0	--	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0157	--	--	--	--	--	0.016	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0083	--	--	--	0	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG	0.0074	--	1.03	--	--	--	0.007	999.999	Pass
CA	150,000 miles	California LEV-III ULEV50	NMOG+NOX	0.0157	--	--	--	--	--	0.016	0.050	Pass
CA	150,000 miles	California LEV-III ULEV50	NOX	0.0083	--	--	--	--	--	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	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	RFMX91005595	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	08/29/2023	Fuel	N/A
Fuel Batch ID	28637	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4087	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)	901.545166	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	561.78479	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0078544	--
CO (Carbon Monoxide)	0.2910527	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.9343482	--
DT-EER (Drive Trace Energy Economy Rating)	-2.0381536	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.9290042	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0145577	--
N2O (Nitrous Oxide)	0.004389	--
HC-NM (Non-methane Hydrocarbon)	0.0157066	--
NMOG (Non-methane organic gases)	0.0161778	--
HC-TOTAL (Total Hydrocarbon)	0.0234511	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	637.0206909	--

Manufacturer Test Comments

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

Certification Summary Information Report

Test Group		VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Test #	RFMX10082154		Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--		Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	06/07/2023		Fuel	N/A
Fuel Batch ID	373-B		Fuel Calibration Number	79
Vehicle Class	N/A		DF Type	Mfr. Determined
Verify Test Lab ID	APTL			
E10 Evaporative Test Measurement Method	--			
Test Start Odometer Reading	3922		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)	
METHANE (CH4 - Methane)		0.00403	--	
CO (Carbon Monoxide)		0.07884	--	
DT-ASCR (Drive Trace Absolute Speed Change Rating)		0.0835	--	
DT-EER (Drive Trace Energy Economy Rating)		0.5509	--	
DT-IWRR (Drive Trace Inertia Work Ratio Rating)		0.323	--	
MFR FE (Manufacturer Fuel Economy)		13.1	13.1	
NOX (Nitrogen Oxide)		0.002635	--	
HC-NM (Non-methane Hydrocarbon)		0.0039	--	
NMOG (Non-methane organic gases)		0.00402	--	
HC-TOTAL (Total Hydrocarbon)		0.0081	--	
Test Result Name		Unrounded Test Result	Verify Calculated CREE/OPT-CREE	
Carbon-Related Exhaust Emissions		667.15	--	
Test Result Name		Unrounded Test Result	Verify Calculated CO2	
Carbon dioxide		666.72585	--	
Manufacturer Test Comments		SPORT MODE WITH START STOP ACTIVE		

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
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	13
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	02/21/2017
Fuel Batch Calibration Effective Date	02/23/2017	Fuel Batch Calibration Ineffective Date	12/31/2100
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.747
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17942
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	Weight Fraction CO2	--
Fuel Batch ID	373-B	Fuel Calibration Number	79
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/21/2023
Fuel Batch Calibration Effective Date	06/21/2023	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)	17922
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	48
Test Fuel Type	28 - Cold CO E10 Regular Gasoline (Tier 3)	Fuel Batch Calibration Date	06/29/2023
Fuel Batch Calibration Effective Date	06/29/2023	Fuel Batch Calibration Ineffective Date	12/31/2100

Certification Summary Information Report

Test Group	VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.745
Fuel Ethanol Volume Percent (%)	10.2	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17881
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		VFMXT03.57AT			Evaporative/Refueling Family			VFMXR0260NDV	
Consolidated List of Standards									
Exhaust Standards									
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	0	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0	0.030
150,000 miles	N2O	--	--	--	--	--	--	0	0.010
150,000 miles	NMOG	--	--	1.1	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.060
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			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	0.006

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family			VFMXR0260NDV	
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	OPT-CREE	--	--	--	--	--	--	0	999.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	--	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	HCHO	--	--	--	--	--	--	--	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.060
150,000 miles	NOX	--	--	--	--	--	--	--	999.999
150,000 miles	PM	--	--	--	--	--	--	--	0.003

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
Fuel		Gasoline			Test Procedure			US06	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	PM	--	--	--	--	--	--	--	0.006

Certification Summary Information Report

Test Group		VFMXT03.57AT			Evaporative/Refueling Family			VFMXR0260NDV	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	--	12.5

Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 50	
Fuel		Gasoline			Test Procedure			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	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.4

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-III ULEV50	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.03	--	--	--	--	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050
150,000 miles	NOX	--	--	--	--	--	--	--	999.999

Evaporative/Refueling Standards

Evaporative/Refueling Family		VFMXR0260NDV		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		

Certification Summary Information Report

Test Group		VFMXT03.57AT		Evaporative/Refueling Family		VFMXR0260NDV	
Evaporative/Refueling Family		VFMXR0260NDV		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	OMHCE	--	0.500	0		
Evaporative/Refueling Family		VFMXR0260NDV		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.003		
Evaporative/Refueling Family		VFMXR0260NDV		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	OMHCE	--	0.05	0		
Evaporative/Refueling Family		VFMXR0260NDV		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		VFMXR0260NDV		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		

Certification Summary Information Report

Test Group		VFMXT03.57AT		Evaporative/Refueling Family		VFMXR0260NDV	
Evaporative/Refueling Family		VFMXR0260NDV		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0		
Evaporative/Refueling Family		VFMXR0260NDV		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		Standard Level		California LEV-III Zero Evap (Option 2)	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	OMHCE	--	0.20	0.003		
Evaporative/Refueling Family		VFMXR0260NDV		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		VFMXR0260NDV		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0		

Certification Summary Information Report

Test Group		VFMXT03.57AT	Evaporative/Refueling Family	VFMXR0260NDV
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	COMB-CREE	Combined Carbon-Related Exhaust Emissions	
CO	Carbon Monoxide	COMB-OPT-CREE	Combined Optional Carbon-Related Exhaust Emissions	
CO2	Carbon dioxide	HC-TOTAL-EQUIV	Total Hydrocarbon equivalent - Evap only	
CREE	Carbon-Related Exhaust Emissions	METHANE-COMB	Combined CH4 for HD 2b/3 vehicles only	
OPT-CREE	Optional Carbon-Related Exhaust Emissions	N2O-COMB	Combined Nitrous Oxide for HD 2b/3 vehicles only	
NOX	Nitrogen Oxide	LEAK-DIA	Effective Leak Diameter (inches)	
PM	Particulate Matter	LEAK-GAS CAP	Gas Cap Leakage (cc/min)	
PM-COMP	SFTP Composite Particulate Matter	CO2-COMB	Combined Carbon Dioxide for HD 2b/3 Vehicles Only	
HC-NM	Non-methane Hydrocarbon	KW-HRS	Integrated DC KW-HRS	
OMHCE	Organic material Hydrocarbon Equivalent	CH4 BAG 1	Bag 1 Methane	
OMNMHCE	Organic material non-methane HC equivalent	CH4 BAG 2	Bag 2 Methane	
NMOG	Non-methane organic gases	CH4 BAG 3	Bag 3 Methane	
HCHO	Formaldehyde	CH4 BAG 4	Bag 4 Methane	
H3C2HO	Acetaldehyde	CO BAG 1	Bag 1 Carbon Monoxide	
HC-NM+NOX	SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03	CO BAG 2	Bag 2 Carbon Monoxide	
HC-NM+NOX-COMP	SFTP Composite Non-methane Hydrocarbon + Nitrogen Oxides	CO BAG 3	Bag 3 Carbon Monoxide	
CO-COMP	SFTP Composite Carbon Monoxide	CO BAG 4	Bag 4 Carbon Monoxide	
ETHANOL	C2H5OH - Ethanol	NMOG BAG 1	Bag 1 Non-methane organic gases	
FE BAG 1	Bag 1 Fuel Economy	NMOG BAG 2	Bag 2 Non-methane organic gases	
FE BAG 2	Bag 2 Fuel Economy	NMOG BAG 3	Bag 3 Non-methane organic gases	
FE BAG 3	Bag 3 Fuel Economy	NMOG BAG 4	Bag 4 Non-methane organic gases	
FE BAG 4	Bag 4 Fuel Economy	ACT-DISTANCE BAG 1	Bag 1 Actual Distance	
MFR FE	Manufacturer Fuel Economy	ACT-DISTANCE BAG 2	Bag 2 Actual Distance	
HC	Hydrocarbon for Running Loss and ORVR	ACT-DISTANCE BAG 3	Bag 3 Actual Distance	
METHANE	CH4 - Methane	ACT-DISTANCE BAG 4	Bag 4 Actual Distance	
METHANOL	CH3OH - Methanol	HC-TOTAL BAG 1	Bag 1 Total Hydrocarbon	
N2O	Nitrous Oxide	HC-TOTAL BAG 2	Bag 2 Total Hydrocarbon	
SPITBACK	Spitback Hydrocarbon in grams	HC-TOTAL BAG 3	Bag 3 Total Hydrocarbon	
AMP-HRS	Integrated Amp-hours	HC-TOTAL BAG 4	Bag 4 Total Hydrocarbon	
START-SOC	System Start State of Charge Watt-hours	WATT-HRS BAG 1	Bag 1 Watt Hours	
END-SOC	System End State of Charge Watt-hours	WATT-HRS BAG 2	Bag 2 Watt Hours	

Certification Summary Information Report

Test Group		VFMXT03.57AT	Evaporative/Refueling Family		VFMXR0260NDV
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

Certification Summary Information Report

Test Group		VFMXT03.57AT	Evaporative/Refueling Family		VFMXR0260NDV
L2ULEV340	California LEV-II ULEV340		L4SULEV85	California LEV-IV SULEV85	
L2LEV630	California LEV-II LEV630		L4ULEV125	California LEV-IV ULEV125	
L2ULEV570	California LEV-II ULEV570		L4ULEV200	California LEV-IV ULEV200	
L3LEV160	California LEV-III LEV160		L4ULEV250	California LEV-IV ULEV250	
L3ULEV125	California LEV-III ULEV125		L4ULEV270	California LEV-IV ULEV270	
L3ULEV70	California LEV-III ULEV70		L4ULEV40	California LEV-IV ULEV40	
L3ULEV50	California LEV-III ULEV50		L4ULEV400	California LEV-IV ULEV400	
L3SULEV30	California LEV-III SULEV30		L4ULEV50	California LEV-IV ULEV50	
L3SULEV20	California LEV-III SULEV20		L4ULEV60	California LEV-IV ULEV60	
L3LEV395	California LEV-III LEV395		L4ULEV70	California LEV-IV ULEV70	
L3ULEV340	California LEV-III ULEV340		T4B170	Federal Tier 4 MDV Bin 170	
L3ULEV250	California LEV-III ULEV250		T4B150	Federal Tier 4 MDV Bin 150	
L3ULEV200	California LEV-III ULEV200		T4B125	Federal Tier 4 MDV Bin 125	
L3SULEV170	California LEV-III SULEV170		T4B100	Federal Tier 4 MDV Bin 100	
L3SULEV150	California LEV-III SULEV150		T4B85	Federal Tier 4 MDV Bin 85	
L3LEV630	California LEV-III LEV630		T4B75	Federal Tier 4 MDV Bin 75	
L3ULEV570	California LEV-III ULEV570		T4B70	Federal Tier 4 Bin 70	
L3ULEV400	California LEV-III ULEV400		T4B65	Federal Tier 4 Bin 65	
L3ULEV270	California LEV-III ULEV270		T4B60	Federal Tier 4 Bin 60	
L3SULEV230	California LEV-III SULEV230		T4B55	Federal Tier 4 Bin 55	
L3SULEV200	California LEV-III SULEV200		T4B50	Federal Tier 4 Bin 50	
T3B160	Federal Tier 3 Bin 160		T4B45	Federal Tier 4 Bin 45	
T3B125	Federal Tier 3 Bin 125		T4B40	Federal Tier 4 Bin 40	
T3B110	Federal Tier 3 Transitional Bin 110		T4B35	Federal Tier 4 Bin 35	
T3B85	Federal Tier 3 Transitional Bin 85		T4B30	Federal Tier 4 Bin 30	
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover		T4B25	Federal Tier 4 Bin 25	
T3B70	Federal Tier 3 Bin 70		T4B20	Federal Tier 4 Bin 20	
T3B50	Federal Tier 3 Bin 50		T4B15	Federal Tier 4 Bin 15	
T3B30	Federal Tier 3 Bin 30		T4B10	Federal Tier 4 Bin 10	
T3B20	Federal Tier 3 Bin 20		T4B5	Federal Tier 4 Bin 5	
T3B0	Federal Tier 3 Bin 0		T4B0	Federal Tier 4 Bin 0	
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395				
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		

Certification Summary Information Report

Test Group		VFMXT03.57AT	Evaporative/Refueling Family		VFMXR0260NDV
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	