Certification Summary Information Report

Manufacturer	Ferrari S.p.A.	**Manufacturer Code**	FEX
Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
Certificate Number	VFEXV03.9H50-006	**CARB Executive Order #**	--
Certificate Issue Date	04/30/2026	**Certificate Revision Date**	--
Certificate Effective Date	04/30/2026	**Conditional Certificate**	No
CSI Revision #	--	**CSI Submission/Revision Date**	04/27/2026 03:48:06 PM
Model Year	2027		

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

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 fuel injection	No

Drive Source #2: Electric Motor

Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
Electricity	--	--

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	**Rechargeable Energy Storage System Indicator**	Yes
Multiple Fuel Combustion	--	**Off-board Charge Capable Indicator**	Yes
Fuel Cell Indicator	No	**EPA Vehicle Class**	LDV
Federal Clean Fuel Vehicle	No	**Federal Clean Fuel Vehicle Standard**	--
Federal Clean Fuel Vehicle ILEV	--	**California Partial Zero Emissions Vehicle Indicator**	No
Durability Group Name	VFEXGPGNNGDI	**Durability Group Equivalency Factor**	1
Reduced Fee Test Group	No	**Certification Region Code(s)**	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	09/01/2026	**CAP2000 Conditional Certificate?**	No
Independent Commercial Importer?	No	**Alternative Fuel Converter Certificate?**	No
SFTP Federal Composite Compliance Identifier	Tier 3	**SFTP Tier 2 Composite CO Option**	No
SFTP LEV-III Composite Compliance Indicator	No		
OBD Compliance Type	CARB	**OBD Demonstration Vehicle Test Group**	VFEXV03.9H50
Test Group OBD Compliance Level	Full - no deficiencies	**Number of Test Group OBD Deficiencies**	0
OBD Deficiencies Comments	--		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Evaporative/Refueling Family Information

Evaporative Summary Information Type	New	**Submission/Correction Date**	03/27/2026 11:00:13 AM
Integrated ORVR?	Yes	**Fuel(s)**	Electricity, Gasoline
Multiple Fuel Storage	Fuels Stored Separately		
Bladder Fuel Tank?	No		
Fuel Tank Material	Metal	**Fuel Tank Material Description**	Aluminum
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	No	**Air Intake System Vapor Storage Device Description**	--
Fuel System Vapor Storage Canister?	Yes	**Other Vapor Storage**	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	175	**Number of Primary Canisters**	1
Number of Bleed Canisters	1	**Bleed Canister Total Working Capacity (grams)**	3
Mfr Evaporative/Refueling Family Comments	--		

Leak Family Details

Leak Family Indicator	Yes		
Canister Bleed Test Indicator	No	**Applicability of Evaporative Canister Bleed Test**	--
Evaporative Canister Bleed Test Comments	--		
CARB Fuel Only (Rig) Test Indicator	No	**Applicability of CARB Fuel Only (Rig) Test**	--
CARB Fuel Only (Rig) Test Comments	--		

Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description
VFEXR017508M-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
Ferrari S.p.A.	2 - Ferrari S.p.A.	193 - Ferrari 849 Testarossa	Federal	2-Wheel Drive, Rear	Automated Manual-Selectable (e.g. Automated Manual with paddles)	8	No
Ferrari S.p.A.	2 - Ferrari S.p.A.	194 - Ferrari 849 Testarossa Spider	Federal	2-Wheel Drive, Rear	Automated Manual-Selectable (e.g. Automated Manual with paddles)	8	No
Ferrari S.p.A.	2 - Ferrari S.p.A.	194 - Ferrari 849 Testarossa Spider	California + CAA Section 177 states	2-Wheel Drive, Rear	Automated Manual-Selectable (e.g. Automated Manual with paddles)	8	No
Ferrari S.p.A.	2 - Ferrari S.p.A.	193 - Ferrari 849 Testarossa	California + CAA Section 177 states	2-Wheel Drive, Rear	Automated Manual-Selectable (e.g. Automated Manual with paddles)	8	No

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Engine Description

Hybrid Type	IC Engine/Electric Motor	**Hybrid Description**	Not applicable.
Engine Type	4-Stroke Spark Ignition	**Mfr Engine Description**	See application.
Engine Block Arrangement	V-shaped engine	**Mfr Engine Block Arrangement Description**	See application.
Camless Valvetrain Indicator	No	**Oil Viscosity/Classification**	5W40
Number of Cylinders/Rotors	8	**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	Palladium + Rhodium	Ceramic	Monolith
2	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith
3	Other	Palladium + Rhodium	Ceramic	Monolith

Mfr After Treatment Device (ATD) Comments	See application.
Direct Ozone Reduction (DOR) Device	Not Equipped
Mfr Emission Control Device Comments	See application.

Engine Configuration Number 1

Engine Displacement (liters)	3.9	**Engine Rated Horsepower**	819
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	Not applicable.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Variable camshaft timing for exhaust and inlet.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	Not applicable.		
Number of Knock Sensors	1	**Number of Air/Fuel Sensors**	4
Air/Fuel Sensor # 1 Type	Heated oxygen	**Air/Fuel Sensor # 1 Description**	--
Air/Fuel Sensor # 2 Type	Heated oxygen	**Air/Fuel Sensor # 2 Description**	--
Air/Fuel Sensor # 3 Type	Heated oxygen	**Air/Fuel Sensor # 3 Description**	--
Air/Fuel Sensor # 4 Type	Heated oxygen	**Air/Fuel Sensor # 4 Description**	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	**Cooled Exhaust Gas Recirculation**	No
EGR Type	--	**Exhaust Gas Recirculation Description if 'Other'**	--
Closed Loop Air Injection System	--		
Air Injection Type	Not Applicable	**Air Injection Type if 'Other'**	--
Mfr Engine Configuration Comments	--		

Certification Summary Information Report

Test Group	VFEXV03.9H50	Evaporative/Refueling Family	VFEXR017508M

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	VFEX10092995	VFEX10093038	VFEX10093100	VFEX10092993	VFEX10092996	--	17.3	--	18.6	--
Electricity	VFEX10092995	VFEX10093038	VFEX10093100	VFEX10092993	VFEX10092996	--	--	--	--	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Electricity	VFEX10092995	VFEX10093038	VFEX10093100
Gasoline	VFEX10092995	VFEX10093038	VFEX10093100

Official Charge Depleting Test Numbers

Test Group Fuel	UDDS	Highway
Electricity	VFEX10093022	VFEX10093169
Gasoline	VFEX10093022	VFEX10093169

Hybrid Electric Vehicle And Fuel Cell Information

Rechargable Energy Storage System	Battery(s)	**Rechargable Energy Storage System, if Other**	--
Battery Type	Lithium Ion	**Number of Battery Packs**	1
Total Voltage of Battery Packs	309	**Battery Energy Capacity**	26.2
Battery Specific Energy	84.2	**Battery Charger Type**	On-Board
Number of Capacitors	--	**Capacitor Rating (In Farads)**	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Rear Wheels	**Driver Controlled Regenerative Braking**	No
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	3		
Motor/Generator Type 1	PMSM = Perm Magnet Synchronous	**Rated Motor/Generator Power**	99
Motor/Generator Type 2	PMSM = Perm Magnet Synchronous	**Rated Motor/Generator Power**	150
Motor/Generator Type 3	PMSM = Perm Magnet Synchronous	**Rated Motor/Generator Power**	99
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	**Usable H2 Fill Capacity (kg)**	--
Mfr Hybrid Electric/ Electric Vehicle Comments	--		

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Emission Data Vehicle Information

Vehicle ID / Configuration	305045 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	TFEXV03.9H50	**Original Evaporative/Refueling Family**	TFEXR017508M
Original Test Vehicle Model Year	2026		

Vehicle Model

Represented Test Vehicle Make	Ferrari	**Represented Test Vehicle Model**	F173 HFE

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

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

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	No	**Rechargeable Energy Storage System Indicator**	Yes
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	1.3	**Odometer Correction Factor**	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Kilometers		
Engine Code	F154 FC	**Rated Horsepower**	819
Displacement (liters)	3.9		
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**	All Wheel Drive
Shift Indicator Light Usage	Equipped, shifted by survey schedule	**Aged Emission Components**	150,000 (mi)
Curb Weight (lbs)	3971	**Equivalent Test Weight (pounds)**	4500
GVWR (lbs)	4586	**N/V Ratio**	26.5
Axle Ratio	4.51		
Transmission Type	Automated Manual	**# of Transmission Gears**	8
Transmission Lockup	No	**Creeper Gear**	No

Certification Summary Information Report

Test Group	VFEXV03.9H50	Evaporative/Refueling Family	VFEXR017508M

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	65.15	0.924	0.04101	-7.124	0.042	0.025	28.5
Cold CO	71.669	0.368	0.026	-1.619	0.035	0.028	N/A
US06	65.15	0.924	0.04101	-7.124	0.042	0.025	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments F173 HFE - MY 2026

Test #	**TFEX10092181**	**Test Procedure**	**34 - Federal fuel 3-day evap**
Exhaust Test # for this Evap Test	TFEX10092180	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/13/2025	**Fuel**	Gasoline
Fuel Batch ID	67414	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	10386	**Odometer Units**	K
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)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2186	--

Manufacturer Test Comments F173 HFE - 3-Day EVAP

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	0.2186	0	0.219	0.275	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2186	0	0.219	0.275	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**TFEX10092182**	**Test Procedure**	**32 - Federal Fuel Running Loss**
Exhaust Test # for this Evap Test	TFEX10092180	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/13/2025	**Fuel**	Gasoline
Fuel Batch ID	67414	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	11198	**Odometer Units**	K
4WD Test Dyno	Yes	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.002	--

Manufacturer Test Comments F173 HFE - Running Losses EVAP.

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	0.002	0	0	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.002	0	0	0.05	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**TFEX10092183**	**Test Procedure**	**24 - Federal fuel refueling test (ORVR)**
Exhaust Test # for this Evap Test	TFEX10092180	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	06/13/2025	**Fuel**	Gasoline
Fuel Batch ID	67414	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	11198	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	--	**Road Speed Fan Usage**	--

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC (Hydrocarbon for Running Loss and ORVR)	0.0185	--

Manufacturer Test Comments F173 HFE - ORVR

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	0.018	0	0.02	0.2	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.018	0	0.02	0.2	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**TFEX10091850**	**Test Procedure**	**67 - Leak Test - Port Near Canister**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	04/03/2025	**Fuel**	Gasoline
Fuel Batch ID	67414	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	9181	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	--	**Road Speed Fan Usage**	--

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
LEAK-DIA (Effective Leak Diameter (inches))	0.00016	--

Manufacturer Test Comments Ferrari MY 2026 - F173 HFE - Leak 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	LEAK-DIA	0	0	0	0.02	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	LEAK-DIA	0	0	0	0.02	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Emission Data Vehicle Information

Vehicle ID / Configuration	318834 / 0	**Manufacturer Vehicle Configuration Number**	0
Original Test Group Name	VFEXV03.9H50	**Original Evaporative/Refueling Family**	VFEXR017508M
Original Test Vehicle Model Year	2027		

Vehicle Model

Represented Test Vehicle Make	Ferrari	**Represented Test Vehicle Model**	F173 HGE

Leak Family Details

Leak Family Identifier	--	**Leak Family Name**	--

Drive Sources and Fuel System Details

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

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	**Multiple Fuel Combustion**	--
Fuel Cell Indicator	No	**Rechargeable Energy Storage System Indicator**	Yes
Rechargeable Energy Storage System	Battery(s)	**Rechargeable Energy Storage System, if 'Other'**	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	1.3	**Odometer Correction Factor**	1
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Kilometers		
Engine Code	F154 FC	**Rated Horsepower**	819
Displacement (liters)	3.9		
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**	All Wheel Drive
Shift Indicator Light Usage	Equipped, shifted by survey schedule	**Aged Emission Components**	150,000 (mi)
Curb Weight (lbs)	4158	**Equivalent Test Weight (pounds)**	4500
GVWR (lbs)	4751	**N/V Ratio**	26.5
Axle Ratio	4.51		
Transmission Type	Automated Manual	**# of Transmission Gears**	8
Transmission Lockup	No	**Creeper Gear**	No

Certification Summary Information Report

Test Group	VFEXV03.9H50	Evaporative/Refueling Family	VFEXR017508M

Dynamometer Coefficients:

Coefficient Category	Target Coefficients A (lbf)	Target Coefficients B (lbf/mph)	Target Coefficients C (lbf/mph**2)	Set Coefficients A (lbf)	Set Coefficients B (lbf/mph)	Set Coefficients C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
City/Highway/Evap	72.861	0.024	0.027	-4.519	-0.488	0.03	18.9
Cold CO	80.147	0.026	0.03	3.17	-0.475	0.033	N/A
US06	72.861	0.024	0.027	-4.519	-0.488	0.03	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments F173 HGE - MY 2027

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092988**	**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	09/02/2025	**Fuel**	Gasoline
Fuel Batch ID	53673	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8077	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	439.9	--
FE BAG 1 (Bag 1 Fuel Economy)	20.0859	20.0859
CO2 BAG 2 (Bag 2 Carbon Dioxide)	407.28	--
FE BAG 2 (Bag 2 Fuel Economy)	21.7103	21.7103
METHANE (CH4 - Methane)	0.0088	--
CO (Carbon Monoxide)	0.386	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	20.9807	20.9807
NOX (Nitrogen Oxide)	0.0087	--
N2O (Nitrous Oxide)	0.0033	--
HC-NM (Non-methane Hydrocarbon)	0.0144	--
NMOG (Non-methane organic gases)	0.0149	--
PM (Particulate Matter)	0.00078	--
HC-TOTAL (Total Hydrocarbon)	0.0219	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	422	422

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	421.31	--

Manufacturer Test Comments F173 HGE - E0 FTP75

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	0.39	--	--	--	0	--	0.4	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	422	--	--	--	0	--	422	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0149	--	--	--	0	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0236	--	--	--	--	--	0.024	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0087	--	--	--	0	--	0.009	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0008	--	--	--	0	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.39	--	--	--	0	--	0.4	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0149	--	--	--	0	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0236	--	--	--	--	--	0.024	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0087	--	--	--	0	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0008	--	--	--	0	--	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	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092989**	**Test Procedure**	**11 - Cold CO**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	27 - Cold CO Premium (Tier 2)
Test Date	09/30/2025	**Fuel**	Gasoline
Fuel Batch ID	75053	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9011	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	0.15	--
FE BAG 1 (Bag 1 Fuel Economy)	9999.999	9999.999
CO2 BAG 2 (Bag 2 Carbon Dioxide)	443.01	--
FE BAG 2 (Bag 2 Fuel Economy)	19.78	19.78
CO2 BAG 3 (Bag 3 Carbon Dioxide)	426.65	--
FE BAG 3 (Bag 3 Fuel Economy)	20.63	20.63
METHANE (CH4 - Methane)	0.00886	--
CO (Carbon Monoxide)	0.6552	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	9999.999	9999.999
NOX (Nitrogen Oxide)	0.001212	--
HC-NM (Non-methane Hydrocarbon)	0.03359	--
HC-TOTAL (Total Hydrocarbon)	0.04187	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	221.58	--

Manufacturer Test Comments F173 HGE - Cold CO - E0 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	0.66	--	--	--	0	--	0.7	10.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	HC-NM	0.0336	--	--	--	0	--	0.034	0.300	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0012	--	--	--	0	--	0.001	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.66	--	--	--	0	--	0.7	10.0	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0012	--	--	--	0	--	0.001	999.999	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092993**	**Test Procedure**	**11 - Cold CO**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	12/12/2025	**Fuel**	Gasoline
Fuel Batch ID	72788	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	10420	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Certification Summary Information Report

Test Group	VFEXV03.9H50	Evaporative/Refueling Family	VFEXR017508M

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	683.617	--
CO BAG 1 (Bag 1 Carbon Monoxide)	2.400341	--
FE BAG 1 (Bag 1 Fuel Economy)	12.623	12.623
CH4 BAG 1 (Bag 1 Methane)	0.024857	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.198038	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	545.407	--
CO BAG 2 (Bag 2 Carbon Monoxide)	0.134661	--
FE BAG 2 (Bag 2 Fuel Economy)	15.916	15.916
CH4 BAG 2 (Bag 2 Methane)	0.004788	--
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.000489	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	472.572	--
CO BAG 3 (Bag 3 Carbon Monoxide)	355.893	--
FE BAG 3 (Bag 3 Fuel Economy)	18.354	18.354
CH4 BAG 3 (Bag 3 Methane)	0.00897	--
NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.002732	--
METHANE (CH4 - Methane)	0.010064	--
CO (Carbon Monoxide)	0.663853	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	15.641	15.641
HC-NM (Non-methane Hydrocarbon)	0.038144	--
NMOG (Non-methane organic gases)	0.041959	--
HC-TOTAL (Total Hydrocarbon)	0.047546	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	554.03	--

Manufacturer Test Comments F173 HGE - E10 - Cold CO - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	0.66	--	--	--	0	--	0.7	10.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	HC-NM	0.0381	--	--	--	0	--	0.038	0.300	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.042	--	--	--	0	--	0.042	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.66	--	--	--	0	--	0.7	10.0	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.042	--	--	--	0	--	0.042	999.999	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092994**	**Test Procedure**	**52 - Fed. fuel 50 F exh.**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/30/2025	**Fuel**	Gasoline
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9861	**Odometer Units**	K
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)
METHANE (CH4 - Methane)	0.0123	--
CO (Carbon Monoxide)	0.46027	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	21.6843	21.6843
NOX (Nitrogen Oxide)	0.0081	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0.0272	--
HC-TOTAL (Total Hydrocarbon)	0.0366	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	399.39	--

Manufacturer Test Comments F173 HGE - FTP p50F - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	150,000 miles	California LEV-IV ULEV50	CO	0.46	--	--	--	0	--	0.5	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0272	--	--	--	0	--	0.027	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0353	--	--	--	--	--	0.035	0.100	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0081	--	--	--	0	--	0.008	999.999	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092995**	**Test Procedure**	**21 - Federal fuel 2-day exhaust (w/can load)**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/24/2025	**Fuel**	Gasoline
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9674	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Certification Summary Information Report

Test Group	VFEXV03.9H50	Evaporative/Refueling Family	VFEXR017508M

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	407.19	--
CO BAG 1 (Bag 1 Carbon Monoxide)	0.8102	--
FE BAG 1 (Bag 1 Fuel Economy)	21.241	21.241
CH4 BAG 1 (Bag 1 Methane)	0.0115	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0318	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	369.41	--
CO BAG 2 (Bag 2 Carbon Monoxide)	0.2822	--
FE BAG 2 (Bag 2 Fuel Economy)	23.461	23.461
CH4 BAG 2 (Bag 2 Methane)	0.0064	--
NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.0132	--
METHANE (CH4 - Methane)	0.0086	--
CO (Carbon Monoxide)	0.50927	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	22.452	22.452
NOX (Nitrogen Oxide)	0.0075	--
N2O (Nitrous Oxide)	0.0035	--
HC-NM (Non-methane Hydrocarbon)	0.0193	--
NMOG (Non-methane organic gases)	0.0287	--
PM (Particulate Matter)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0276	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	387	387

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	385.66	--

Manufacturer Test Comments F173 HGE - FTP75 - E10 Summer - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	0.51	--	--	--	0	--	0.5	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CO-COMP	0.32	--	--	--	0	--	0.3	4.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	CREE	387	--	--	--	0	--	387	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0287	--	--	--	0	--	0.029	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0362	--	--	--	--	--	0.036	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX-COMP	0.02	--	--	--	0	--	0.02	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0075	--	--	--	0	--	0.008	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0	--	--	--	0	--	0	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.51	--	--	--	0	--	0.5	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0287	--	--	--	0	--	0.029	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0362	--	--	--	--	--	0.036	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0075	--	--	--	0	--	0.008	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0	--	--	--	0	--	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	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092990**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	07/31/2025	**Fuel**	Gasoline
Fuel Batch ID	53673	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7449	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.000765	--
CO (Carbon Monoxide)	0.077578	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	26.708	26.708
NOX (Nitrogen Oxide)	0.000276	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.000604	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	331	331

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	330.68	--

Manufacturer Test Comments F173 HGE - HWFET - E0 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	331	--	--	--	0	--	331	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0	--	--	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0003	--	--	--	--	--	0	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0003	--	--	--	0	--	0	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CREE	331	--	--	--	0	--	331	--	--
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0	--	--	--	0	--	0	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	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092996**	**Test Procedure**	**3 - HWFE**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/14/2025	**Fuel**	Gasoline
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9268	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.002125	--
CO (Carbon Monoxide)	0.023047	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	26.873	26.873
NOX (Nitrogen Oxide)	0.001996	--
HC-NM (Non-methane Hydrocarbon)	0.000064	--
NMOG (Non-methane organic gases)	0.00007	--
HC-TOTAL (Total Hydrocarbon)	0.001902	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	323	323

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	322.915	--

Manufacturer Test Comments F173 HGE - HWFET - E10 Summer - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	323	--	--	--	0	--	323	--	--
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0001	--	--	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0021	--	--	--	--	--	0.002	0.050	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.002	--	--	--	0	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CREE	323	--	--	--	0	--	323	--	--
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0001	--	--	--	0	--	0	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	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092992**	**Test Procedure**	**90 - US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	09/15/2025	**Fuel**	Gasoline
Fuel Batch ID	70811	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8767	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.002497	--
CO (Carbon Monoxide)	0.022822	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	21.811	21.811
NOX (Nitrogen Oxide)	0.016978	--
HC-NM (Non-methane Hydrocarbon)	0	--
NMOG (Non-methane organic gases)	0.003355	--
PM (Particulate Matter)	0.0002	--
HC-TOTAL (Total Hydrocarbon)	0.005644	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	408.568	--

Manufacturer Test Comments F173 HGE - US06 - E0 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	CO	0.0228	--	--	--	0	--	0.023	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0034	--	--	--	0	--	0.003	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0204	--	--	--	--	--	0.02	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.017	--	--	--	0	--	0.017	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0002	--	--	--	0	--	0	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.02	--	--	--	0	--	0	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0034	--	--	--	0	--	0.003	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0204	--	--	--	--	--	0.02	0.060	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.017	--	--	--	0	--	0.017	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0002	--	--	--	0	--	0	0.003	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093038**	**Test Procedure**	**90 - US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/16/2025	**Fuel**	Gasoline
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9414	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.002915	--
CO (Carbon Monoxide)	0.021596	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	21.781	21.781
NOX (Nitrogen Oxide)	0.020976	--
HC-NM (Non-methane Hydrocarbon)	0.000343	--
NMOG (Non-methane organic gases)	0.000377	--
PM (Particulate Matter)	0.00013	--
HC-TOTAL (Total Hydrocarbon)	0.002864	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	398	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	398.407	--

Manufacturer Test Comments F173 HGE - US06 - E10 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	CO	0.0216	--	--	--	0	--	0.022	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0004	--	--	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0214	--	--	--	--	--	0.021	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.021	--	--	--	0	--	0.021	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	PM	0.0001	--	--	--	0	--	0	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.02	--	--	--	0	--	0	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0004	--	--	--	0	--	0	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0214	--	--	--	--	--	0.021	0.060	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.021	--	--	--	0	--	0.021	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	PM	0.0001	--	--	--	0	--	0	0.003	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10092991**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	10/09/2025	**Fuel**	Gasoline
Fuel Batch ID	70811	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9207	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0175	--
CO (Carbon Monoxide)	0.68421	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	21.9059	21.9059
NOX (Nitrogen Oxide)	0.0022	--
HC-NM (Non-methane Hydrocarbon)	0.0116	--
NMOG (Non-methane organic gases)	0.0121	--
HC-TOTAL (Total Hydrocarbon)	0.0286	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	406.63	--

Manufacturer Test Comments F173 HGE - SC03 - E0 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NMHC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 50	CO	0.6842	--	--	--	0	--	0.684	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0.0121	--	--	--	0	--	0.012	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0143	--	--	--	--	--	0.014	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0022	--	--	--	0	--	0.002	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.68	--	--	--	0	--	0.7	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0.0121	--	--	--	0	--	0.012	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0143	--	--	--	--	--	0.014	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0022	--	--	--	0	--	0.002	999.999	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093100**	**Test Procedure**	**95 - SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	01/22/2026	**Fuel**	Gasoline
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	LDV/Passenger Car	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	10512	**Odometer Units**	K
4WD Test Dyno	No	**Diesel Adjustment Factor Usage**	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	**Road Speed Fan Usage**	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.014842	--
CO (Carbon Monoxide)	0.356324	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0	--
DT-EER (Drive Trace Energy Economy Rating)	0	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0	--
MFR FE (Manufacturer Fuel Economy)	19.469	19.469
NOX (Nitrogen Oxide)	0.003543	--
HC-NM (Non-methane Hydrocarbon)	0.008134	--
NMOG (Non-methane organic gases)	0	--
HC-TOTAL (Total Hydrocarbon)	0.022512	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	445.144	--

Manufacturer Test Comments F173 HGE - SC03 - Charge Sustaining

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

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	0.3563	--	--	--	0	--	0.356	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG	0	--	--	--	0	--	0	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NMOG+NOX	0.0035	--	--	--	--	--	0.004	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 50	NOX	0.0035	--	--	--	0	--	0.004	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	CO	0.36	--	--	--	0	--	0.4	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG	0	--	--	--	0	--	0	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV50	NMOG+NOX	0.0035	--	--	--	--	--	0.004	0.050	Pass
CA	150,000 miles	California LEV-IV ULEV50	NOX	0.0035	--	--	--	0	--	0.004	999.999	Pass

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093018**	**Test Procedure**	**81 - Charge Depleting UDDS**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	09/11/2025	**Fuel**	N/A
Fuel Batch ID	70811	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8622	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.6321
Charge Depleting Range (Calculated miles)	14.92	**Charge Depleting Range (Actual miles)**	11.24
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.45	**Equivalent All Electric Range (miles)**	7.45
Number of Charge Depleting Bags/Phases Conducted	3	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.454
Average System Voltage	309.1
CH4 - Methane	0.003
Carbon Monoxide	0
Carbon dioxide	0.71
Carbon-Related Exhaust Emissions	1
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	8.8481236
Manufacturer Fuel Economy	9999.9999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	5363.461698
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.466
Average System Voltage	309.1
CH4 - Methane	0.0091
Carbon Monoxide	0.7867
Carbon dioxide	262.59
Carbon-Related Exhaust Emissions	264
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	13.3668827
Manufacturer Fuel Economy	33.8176
Nitrogen Oxide	0.0184
Non-methane Hydrocarbon	0.0344
Non-methane organic gases	0.0358
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2971.678629
System Start State of Charge Watt-hours	5363.461698
Total Hydrocarbon	0.0423

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.469
Average System Voltage	309.1
CH4 - Methane	0.0111
Carbon Monoxide	0.3842
Carbon dioxide	345.11
Carbon-Related Exhaust Emissions	346
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	13.7500904
Manufacturer Fuel Economy	25.8173
Nitrogen Oxide	0.0012
Non-methane Hydrocarbon	0.0042
Non-methane organic gases	0.0044
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2807.06146
System Start State of Charge Watt-hours	2971.678629
Total Hydrocarbon	0.0138

Manufacturer Test Comments F173 HGE - UDDS - E0 Summer - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093019**	**Test Procedure**	**86 - Charge Depleting 20 Degree F FTP**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	27 - Cold CO Premium (Tier 2)
Test Date	09/30/2025	**Fuel**	N/A
Fuel Batch ID	75053	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9011	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.682
Charge Depleting Range (Calculated miles)	14.97	**Charge Depleting Range (Actual miles)**	9.36
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.51	**Equivalent All Electric Range (miles)**	7.51
Number of Charge Depleting Bags/Phases Conducted	3	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.51
Average System Voltage	309.1
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0.15
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	13.0891078
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4052.576191
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0

Charge Depleting Bag/Phase #2

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.46
Average System Voltage	309.1
CH4 - Methane	0.0177
Carbon Monoxide	1.3104
Carbon dioxide	0.44301
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.3264143
Manufacturer Fuel Economy	19.78
Nitrogen Oxide	0.0242
Non-methane Hydrocarbon	0.0672
Non-methane organic gases	0.0699
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3049.387044
System Start State of Charge Watt-hours	4052.576191
Total Hydrocarbon	0.0837

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.55
Average System Voltage	309.1
CH4 - Methane	0.0058
Carbon Monoxide	0.2127
Carbon dioxide	426.65
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.7114957
Manufacturer Fuel Economy	20.63
Nitrogen Oxide	0.0004
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2928.439703
System Start State of Charge Watt-hours	3049.387044
Total Hydrocarbon	0.0024

Manufacturer Test Comments F173 HGE - Cold CO - E0 Winter - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093020**	**Test Procedure**	**85 - Charge Depleting SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	09/13/2025	**Fuel**	N/A
Fuel Batch ID	70811	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8659	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.324
Charge Depleting Range (Calculated miles)	14.3	**Charge Depleting Range (Actual miles)**	11.29
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	11.75	**Equivalent All Electric Range (miles)**	11.75
Number of Charge Depleting Bags/Phases Conducted	5	**Transition Bag/Phase Number**	4

Charge Depleting Bag/Phase #1

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.565
Average System Voltage	309.1
CH4 - Methane	0.004418
Carbon Monoxide	0
Carbon dioxide	1.652
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	4.7799476
Manufacturer Fuel Economy	5261.818
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.008864
Non-methane organic gases	0.009219
Non-methane organic gases plus Nitrogen Oxides	999.999
Particulate Matter	0.000304
System End State of Charge Watt-hours	6620.937992
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.0013144

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.579
Average System Voltage	309.1
CH4 - Methane	0.003069
Carbon Monoxide	0
Carbon dioxide	1.783
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	9.6455746
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.010306
Non-methane organic gases	0.010719
Non-methane organic gases plus Nitrogen Oxides	999.999
Particulate Matter	0.001718
System End State of Charge Watt-hours	5089.564909
System Start State of Charge Watt-hours	6620.937992
Total Hydrocarbon	0.013279

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.577
Average System Voltage	309.1
CH4 - Methane	0.006492
Carbon Monoxide	0
Carbon dioxide	1.661
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	14.5196779
Manufacturer Fuel Economy	5235.358
Nitrogen Oxide	0.000152
Non-methane Hydrocarbon	0.006604
Non-methane organic gases	0.006868
Non-methane organic gases plus Nitrogen Oxides	999.999
Particulate Matter	0.000253
System End State of Charge Watt-hours	3557.84864
System Start State of Charge Watt-hours	5089.564909
Total Hydrocarbon	0.012893

Charge Depleting Bag/Phase #4

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.583
Average System Voltage	309.1
CH4 - Methane	0.015897
Carbon Monoxide	1.21828
Carbon dioxide	382.221
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.0758914
Manufacturer Fuel Economy	23.184
Nitrogen Oxide	0.02669
Non-methane Hydrocarbon	0.076528
Non-methane organic gases	0.079589
Non-methane organic gases plus Nitrogen Oxides	999.999
Particulate Matter	0.000145
System End State of Charge Watt-hours	3070.158652
System Start State of Charge Watt-hours	3557.848684
Total Hydrocarbon	0.091928

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.589
Average System Voltage	309.1
CH4 - Methane	0.016216
Carbon Monoxide	0.929539
Carbon dioxide	486.349
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	15.8925054
Manufacturer Fuel Economy	18.267
Nitrogen Oxide	0.001136
Non-methane Hydrocarbon	0.011294
Non-methane organic gases	0.011746
Non-methane organic gases plus Nitrogen Oxides	999.999
Particulate Matter	0.000252
System End State of Charge Watt-hours	3087.447924
System Start State of Charge Watt-hours	3070.158652
Total Hydrocarbon	0.027003

Manufacturer Test Comments F173 HGE - SC03 - E0 - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093021**	**Test Procedure**	**86 - Charge Depleting 20 Degree F FTP**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	12/18/2025	**Fuel**	N/A
Fuel Batch ID	72788	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	10378	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.602
Charge Depleting Range (Calculated miles)	14.93	**Charge Depleting Range (Actual miles)**	9.27
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.48	**Equivalent All Electric Range (miles)**	7.48
Number of Charge Depleting Bags/Phases Conducted	3	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.479
Average System Voltage	309.1
CH4 - Methane	0
Carbon Monoxide	0
Carbon dioxide	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	13.1758564
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.0019
Non-methane organic gases	0.0021
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4025.760721
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.0013

Charge Depleting Bag/Phase #2

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.447
Average System Voltage	309.1
CH4 - Methane	0.0185
Carbon Monoxide	1.2673
Carbon dioxide	480.29
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.3510214
Manufacturer Fuel Economy	17.99
Nitrogen Oxide	0.0274
Non-methane Hydrocarbon	0.1163
Non-methane organic gases	0.1279
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3013.126725
System Start State of Charge Watt-hours	4025.760721
Total Hydrocarbon	0.1336

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.458
Average System Voltage	309.1
CH4 - Methane	0.0051
Carbon Monoxide	0.1651
Carbon dioxide	491.74
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.2224719
Manufacturer Fuel Economy	17.65
Nitrogen Oxide	0.0017
Non-methane Hydrocarbon	0
Non-methane organic gases	0.0028
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3027.226146
System Start State of Charge Watt-hours	3013.126725
Total Hydrocarbon	0.0073

Manufacturer Test Comments F173 HGE - Cold CO - E10 Winter - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093022**	**Test Procedure**	**81 - Charge Depleting UDDS**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/22/2025	**Fuel**	N/A
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9546	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.611
Charge Depleting Range (Calculated miles)	14.89	**Charge Depleting Range (Actual miles)**	12.23
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.46	**Equivalent All Electric Range (miles)**	7.46
Number of Charge Depleting Bags/Phases Conducted	3	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.46
Average System Voltage	309.1
CH4 - Methane	0.0029
Carbon Monoxide	0.0032
Carbon dioxide	2.16
Carbon-Related Exhaust Emissions	2
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	8.6841217
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.0088
Non-methane organic gases	0.0096
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	5414.1551
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.0115

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.427
Average System Voltage	309.1
CH4 - Methane	0.0108
Carbon Monoxide	0.5404
Carbon dioxide	200.51
Carbon-Related Exhaust Emissions	201
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	14.2670873
Manufacturer Fuel Economy	43.0719
Nitrogen Oxide	0.0168
Non-methane Hydrocarbon	0.034
Non-methane organic gases	0.0374
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3026.271391
System Start State of Charge Watt-hours	5414.1551
Total Hydrocarbon	0.0445

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.488
Average System Voltage	309.1
CH4 - Methane	0.0135
Carbon Monoxide	0.5738
Carbon dioxide	347.63
Carbon-Related Exhaust Emissions	349
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	14.4397827
Manufacturer Fuel Economy	24.8924
Nitrogen Oxide	0.002
Non-methane Hydrocarbon	0
Non-methane organic gases	0.0281
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2928.127512
System Start State of Charge Watt-hours	3026.271391
Total Hydrocarbon	0.0386

Manufacturer Test Comments F173 HGE - UDDS - FTP75 - E10 - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093167**	**Test Procedure**	**84 - Charge Depleting Highway**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	08/07/2025	**Fuel**	N/A
Fuel Batch ID	53673	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7644	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.5517
Charge Depleting Range (Calculated miles)	20.52	**Charge Depleting Range (Actual miles)**	13.85
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	10.26	**Equivalent All Electric Range (miles)**	10.26
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.257
Average System Voltage	309.1
CH4 - Methane	0.0001
Carbon Monoxide	0.0004
Carbon dioxide	0.16
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	12.4709853
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.0005
Non-methane organic gases	0.0005
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4243.632961
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.0006

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.261
Average System Voltage	309.1
CH4 - Methane	0.0043
Carbon Monoxide	0.4767
Carbon dioxide	245.78
Carbon-Related Exhaust Emissions	247
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.836698
Manufacturer Fuel Economy	35.9036
Nitrogen Oxide	0.0159
Non-methane Hydrocarbon	0.0169
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2890.635178
System Start State of Charge Watt-hours	4243.632961
Total Hydrocarbon	0.0206

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.276
Average System Voltage	309.1
CH4 - Methane	0.0007
Carbon Monoxide	0.0104
Carbon dioxide	317.06
Carbon-Related Exhaust Emissions	317
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.7213834
Manufacturer Fuel Economy	27.9224
Nitrogen Oxide	0.0016
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2925.239126
System Start State of Charge Watt-hours	2890.635178
Total Hydrocarbon	0.0002

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.274
Average System Voltage	309.1
CH4 - Methane	0.001
Carbon Monoxide	0.0218
Carbon dioxide	318.09
Carbon-Related Exhaust Emissions	318
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.5168009
Manufacturer Fuel Economy	27.83
Nitrogen Oxide	0.0017
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2987.211565
System Start State of Charge Watt-hours	2925.239126
Total Hydrocarbon	0.0002

Manufacturer Test Comments F173 HGE - HWFET - E0 Summer - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093168**	**Test Procedure**	**83 - Charge Depleting US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	61 - Tier 2 Cert Gasoline
Test Date	09/05/2025	**Fuel**	N/A
Fuel Batch ID	53673	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	8351	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	342	**Recharge Event Energy (kiloWatt-hours)**	6.4341
Charge Depleting Range (Calculated miles)	15.98	**Charge Depleting Range (Actual miles)**	12.73
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.99	**Equivalent All Electric Range (miles)**	7.99
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.987
Average System Voltage	309.1
CH4 - Methane	0.0075
Carbon Monoxide	0.5191
Carbon dioxide	148.68
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	10.3187982
Manufacturer Fuel Economy	59.1887
Nitrogen Oxide	0.0215
Non-methane Hydrocarbon	0.0211
Non-methane organic gases	0.022
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4908.880079
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.0276

Charge Depleting Bag/Phase #2

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.995
Average System Voltage	309.1
CH4 - Methane	0.007
Carbon Monoxide	0.4843
Carbon dioxide	233.95
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.4434498
Manufacturer Fuel Economy	37.7154
Nitrogen Oxide	0.0014
Non-methane Hydrocarbon	0.0039
Non-methane organic gases	0.0041
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2980.640822
System Start State of Charge Watt-hours	4908.880079
Total Hydrocarbon	0.0099

Charge Depleting Bag/Phase #3

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.99
Average System Voltage	309.1
CH4 - Methane	0.003
Carbon Monoxide	0.0641
Carbon dioxide	412.18
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.3267786
Manufacturer Fuel Economy	21.4739
Nitrogen Oxide	0.0135
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3003.595231
System Start State of Charge Watt-hours	2980.640822
Total Hydrocarbon	0.0024

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.986
Average System Voltage	309.1
CH4 - Methane	0.0039
Carbon Monoxide	0.0508
Carbon dioxide	407.78
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.2298813
Manufacturer Fuel Economy	21.7066
Nitrogen Oxide	0.0327
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3019.388045
System Start State of Charge Watt-hours	3003.595231
Total Hydrocarbon	0.0029

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Manufacturer Test Comments F173 HGE - US06 - E0 - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093169**	**Test Procedure**	**84 - Charge Depleting Highway**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/21/2025	**Fuel**	N/A
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9479	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.7741
Charge Depleting Range (Calculated miles)	20.49	**Charge Depleting Range (Actual miles)**	14.42
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	10.24	**Equivalent All Electric Range (miles)**	10.24
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.239
Average System Voltage	309.1
CH4 - Methane	0.001619
Carbon Monoxide	0.000684
Carbon dioxide	0.289
Carbon-Related Exhaust Emissions	0
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	12.1425795
Manufacturer Fuel Economy	9999.9999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4345.098422
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.00099

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.247
Average System Voltage	309.1
CH4 - Methane	0.004947
Carbon Monoxide	0.414781
Carbon dioxide	221.845
Carbon-Related Exhaust Emissions	223
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	17.0983643
Manufacturer Fuel Economy	38.988
Nitrogen Oxide	0.011088
Non-methane Hydrocarbon	0.029843
Non-methane organic gases	0.032827
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2809.335534
System Start State of Charge Watt-hours	4345.098422
Total Hydrocarbon	0.34122

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.248
Average System Voltage	309.1
CH4 - Methane	0.003134
Carbon Monoxide	0.052968
Carbon dioxide	0.052968
Carbon-Related Exhaust Emissions	306
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	17.3783061
Manufacturer Fuel Economy	28.397
Nitrogen Oxide	0.000437
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2717.868637
System Start State of Charge Watt-hours	2809.335534
Total Hydrocarbon	0.000937

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	10.243
Average System Voltage	309.1
CH4 - Methane	0.001692
Carbon Monoxide	0.068459
Carbon dioxide	308.237
Carbon-Related Exhaust Emissions	308
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	17.4168897
Manufacturer Fuel Economy	28.146
Nitrogen Oxide	0.00069
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2702.95461
System Start State of Charge Watt-hours	2717.868637
Total Hydrocarbon	0.001123

Manufacturer Test Comments F173 HGE - HWFET - E10 - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093170**	**Test Procedure**	**85 - Charge Depleting SC03**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	01/21/2026	**Fuel**	N/A
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	10483	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	343	**Recharge Event Energy (kiloWatt-hours)**	6.7112
Charge Depleting Range (Calculated miles)	14.34	**Charge Depleting Range (Actual miles)**	11.12
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	11.33	**Equivalent All Electric Range (miles)**	11.33
Number of Charge Depleting Bags/Phases Conducted	5	**Transition Bag/Phase Number**	4

Charge Depleting Bag/Phase #1

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.588
Average System Voltage	309.1
CH4 - Methane	0.000254
Carbon Monoxide	0.000029
Carbon dioxide	0.132
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	11.9024092
Manufacturer Fuel Economy	9999.9999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.000003
Non-methane organic gases	0.000004
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	6620.937992
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.000249

Charge Depleting Bag/Phase #2

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.587
Average System Voltage	309.1
CH4 - Methane	0.000211
Carbon Monoxide	0.000015
Carbon dioxide	0.086
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.7974334
Manufacturer Fuel Economy	9999.9999
Nitrogen Oxide	0.000061
Non-methane Hydrocarbon	0.000002
Non-methane organic gases	0.000002
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	5089.564909
System Start State of Charge Watt-hours	6620.937992
Total Hydrocarbon	0.000206

Charge Depleting Bag/Phase #3

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.586
Average System Voltage	309.1
CH4 - Methane	0.000249
Carbon Monoxide	0.000014
Carbon dioxide	0.125
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	14.5196779
Manufacturer Fuel Economy	9999.999
Nitrogen Oxide	0
Non-methane Hydrocarbon	0.000004
Non-methane organic gases	0.000005
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3557.848684
System Start State of Charge Watt-hours	5089.564909
Total Hydrocarbon	0.000246

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.58
Average System Voltage	309.1
CH4 - Methane	0.014733
Carbon Monoxide	1.649191
Carbon dioxide	444.029
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.0758914
Manufacturer Fuel Economy	19.418
Nitrogen Oxide	0.034862
Non-methane Hydrocarbon	0.092576
Non-methane organic gases	0.101834
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3070.158652
System Start State of Charge Watt-hours	3557.848684
Total Hydrocarbon	0.106848

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group VFEXV03.9H50 **Evaporative/Refueling Family** VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	3.596
Average System Voltage	309.1
CH4 - Methane	0.016598
Carbon Monoxide	0.419039
Carbon dioxide	414.48
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	15.8925054
Manufacturer Fuel Economy	20.901
Nitrogen Oxide	0.003298
Non-methane Hydrocarbon	0.010376
Non-methane organic gases	0.011413
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	3087.447924
System Start State of Charge Watt-hours	3070.158652
Total Hydrocarbon	0.026454

Manufacturer Test Comments F173 HGE - SC03 - E10 - Charge Depleting

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test #	**VFEX10093171**	**Test Procedure**	**83 - Charge Depleting US06**
Exhaust Test # for this Evap Test	--	**Test Fuel Type**	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/31/2025	**Fuel**	N/A
Fuel Batch ID	75730	**Fuel Calibration Number**	1
Vehicle Class	N/A	**DF Type**	Aged components installed In the emission data vehicle
Verify Test Lab ID	Ferrari S.p.A.		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	9886	**Odometer Units**	K
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

PHEV/EV Charge Depleting Test Information

Recharge Event Voltage	342	**Recharge Event Energy (kiloWatt-hours)**	6.8172
Charge Depleting Range (Calculated miles)	16	**Charge Depleting Range (Actual miles)**	11.29
Charge Depleting Range Highway (Calculated miles)	--	**Derived 5-Cycle Coefficient Model Year**	2017
All Electric Range Unadjusted (miles)	7.99	**Equivalent All Electric Range (miles)**	7.99
Number of Charge Depleting Bags/Phases Conducted	4	**Transition Bag/Phase Number**	2

Charge Depleting Bag/Phase #1

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	7.99
Average System Voltage	309.1
CH4 - Methane	0.007587
Carbon Monoxide	0.527726
Carbon dioxide	113.002
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	11.9024092
Manufacturer Fuel Economy	76.162
Nitrogen Oxide	0.01611
Non-methane Hydrocarbon	0.032797
Non-methane organic gases	0.036077
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	4419.385312
System Start State of Charge Watt-hours	8098.42
Total Hydrocarbon	0.039359

Charge Depleting Bag/Phase #2

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	8.015
Average System Voltage	309.1
CH4 - Methane	0.008948
Carbon Monoxide	0.496494
Carbon dioxide	284.572
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.7974334
Manufacturer Fuel Economy	30.409
Nitrogen Oxide	0.007615
Non-methane Hydrocarbon	0.006901
Non-methane organic gases	0.007591
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2890.153746
System Start State of Charge Watt-hours	4419.385312
Total Hydrocarbon	0.01464

Charge Depleting Bag/Phase #3

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	8.046
Average System Voltage	309.1
CH4 - Methane	0.003969
Carbon Monoxide	0.01751
Carbon dioxide	451.954
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.7675116
Manufacturer Fuel Economy	19.201
Nitrogen Oxide	0.019878
Non-methane Hydrocarbon	0
Non-methane organic gases	0
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2899.402585
System Start State of Charge Watt-hours	2890.153746
Total Hydrocarbon	0.003077

Charge Depleting Bag/Phase #4

Test Result/Emission Name	Unrounded Test Result
Actual Distance Driven (miles)	8.044
Average System Voltage	309.1
CH4 - Methane	0.00326
Carbon Monoxide	0.067887
Carbon dioxide	428.961
Drive Trace Absolute Speed Change Rating	0
Drive Trace Energy Economy Rating	0
Drive Trace Inertia Work Ratio Rating	0
Integrated Amp-hours	16.6249159
Manufacturer Fuel Economy	20.226
Nitrogen Oxide	0.003777
Non-methane Hydrocarbon	0.001242
Non-methane organic gases	0.001367
Non-methane organic gases plus Nitrogen Oxides	999.999
System End State of Charge Watt-hours	2943.478902
System Start State of Charge Watt-hours	2899.402585
Total Hydrocarbon	0.004062

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
Manufacturer Test Comments	F173 HGE - US06 - E10 - Charge Depleting		

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Fuel Properties

Fuel Batch ID	**72788**	**Fuel Calibration Number**	**1**
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	**Fuel Batch Calibration Date**	03/17/2025
Fuel Batch Calibration Effective Date	03/05/2025	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.746
Fuel Ethanol Volume Percent (%)	9.7	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.471	**Fuel Carbon Mass Fraction (E10)**	0.826
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	**Weight Fraction CO2**	--

Fuel Batch ID	**75730**	**Fuel Calibration Number**	**1**
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	09/25/2025
Fuel Batch Calibration Effective Date	06/19/2025	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.754
Fuel Ethanol Volume Percent (%)	9.6	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.461	**Fuel Carbon Mass Fraction (E10)**	0.826
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	**Weight Fraction CO2**	--

Fuel Batch ID	**70811**	**Fuel Calibration Number**	**1**
Test Fuel Type	61 - Tier 2 Cert Gasoline	**Fuel Batch Calibration Date**	07/22/2025
Fuel Batch Calibration Effective Date	12/12/2024	**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**	0.741
Fuel Ethanol Volume Percent (%)	--	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	18405
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.868	**Weight Fraction CO2**	--

Fuel Batch ID	**53673**	**Fuel Calibration Number**	**1**
Test Fuel Type	61 - Tier 2 Cert Gasoline	**Fuel Batch Calibration Date**	12/01/2022
Fuel Batch Calibration Effective Date	10/04/2022	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.736
Fuel Ethanol Volume Percent (%)	--	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	18479
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	**67414**	**Fuel Calibration Number**	**1**
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	**Fuel Batch Calibration Date**	02/10/2025
Fuel Batch Calibration Effective Date	07/05/2024	**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**	0.754
Fuel Ethanol Volume Percent (%)	9.7	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	--
Fuel Net Heat of Combustion (E10) (MJ/kg)	41.775	**Fuel Carbon Mass Fraction (E10)**	0.829
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	--	**Weight Fraction CO2**	--
Fuel Batch ID	**75053**	**Fuel Calibration Number**	**1**
Test Fuel Type	27 - Cold CO Premium (Tier 2)	**Fuel Batch Calibration Date**	06/02/2025
Fuel Batch Calibration Effective Date	05/28/2025	**Fuel Batch Calibration Ineffective Date**	--
Carbon Weight Fraction NMHC	--	**Carbon Weight Fraction HC**	--
Exhaust Carbon Weight Fraction	--	**Fuel Methanol Volume Fraction**	--
Fuel Density (grams/cubic ft)	--	**Fuel Specific Gravity**	0.734
Fuel Ethanol Volume Percent (%)	--	**Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)**	18467
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	**Fuel Carbon Mass Fraction (E10)**	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.866	**Weight Fraction CO2**	--

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**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	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV ULEV50
Fuel	Gasoline	**Test Procedure**	Fed. fuel 50 F exh.

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	1.7
150,000 miles	HCHO	--	--	--	--	--	--	--	0.016
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.100
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**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	4.7
150,000 miles	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 50
Fuel	Gasoline	**Test Procedure**	SC03

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	999.999
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	999.999
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV ULEV50
Fuel	Gasoline	**Test Procedure**	SC03

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	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV 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	CREE	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV ULEV50
Fuel	Gasoline	**Test Procedure**	US06

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	9.6
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.060
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	Federal Tier 3 Bin 50
Fuel	Gasoline	**Test Procedure**	US06

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	999.999
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.006

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
Cert Region	Federal	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**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
150,000 miles	CO	--	--	--	--	--	--	0	10.0
150,000 miles	HC-NM	--	--	--	--	--	--	0	0.300
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV ULEV50
Fuel	Gasoline	**Test Procedure**	Federal fuel 2-day exhaust (w/can load)

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0	1.7
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0	0.050
150,000 miles	NOX	--	--	--	--	--	--	0	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	California + CAA Section 177 states	**Cert/In-Use Code**	Cert
Vehicle Class	LDV/Passenger Car	**Standard Level**	California LEV-IV 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
150,000 miles	CO	--	--	--	--	--	--	0	10.0
150,000 miles	NMOG	--	--	--	--	--	--	0	999.999
150,000 miles	NOX	--	--	--	--	--	--	0	999.999

Evaporative/Refueling Standards

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	Leak Test - Port Near Canister		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.02	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	Federal
Cert/In-Use Code	Cert	**Standard Level**	Federal Tier 3 Evap
Test Procedure	Leak Test - Port Near Canister		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	LEAK-DIA	--	0.02	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
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	VFEXR017508M	**Cert Region**	Federal
Cert/In-Use Code	Cert	**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	VFEXR017508M	**Cert Region**	Federal
Cert/In-Use Code	Cert	**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	--	0.275	0

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV Zero Evap (Option 2)
Test Procedure	2-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.275	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV 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	HC	--	0.20	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	California + CAA Section 177 states
Cert/In-Use Code	Cert	**Standard Level**	California LEV-IV 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	HC-TOTAL-EQUIV	--	0.275	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	Federal
Cert/In-Use Code	Cert	**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	--	0.275	0

Evaporative/Refueling Family	VFEXR017508M	**Cert Region**	Federal
Cert/In-Use Code	Cert	**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	--	0.20	0

Certification Summary Information Report

Test Group	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M

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	VFEXV03.9H50	**Evaporative/Refueling Family**	VFEXR017508M
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

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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

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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