

Certification Summary Information Report

Manufacturer	Subaru Corporation	Manufacturer Code	FJX
Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Certificate Number	VFJXV02.4AJM-001	CARB Executive Order #	--
Certificate Issue Date	05/19/2026	Certificate Revision Date	--
Certificate Effective Date	05/19/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	04/23/2026 05:03:33 AM
Model Year	2027		

Test Group Information

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

Drive Sources and Fuel(s)

Drive Source #1: Combustion Engine

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	--
Fuel Cell Indicator	--	EPA Vehicle Class	LDV
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VFJXGPGNNCK	Durability Group Equivalency Factor	1.0
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	07/27/2026	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	VFJXV02.4AJM
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	1
OBD Deficiencies Comments	We received the deficiency of the PCV system monitoring and the concern of the voltage sensor rationality monitoring.		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	03/10/2026 01:42:26 AM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	HDPE/EVOH multi layer				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	Yes	Air Intake System Vapor Storage Device Description	HC Trap				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	116	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	--				
Mfr Evaporative/Refueling Family Comments	--						
Leak Family Details							
Leak Family Indicator	Yes						
Canister Bleed Test Indicator	Yes	Applicability of Evaporative Canister Bleed Test	50 State				
Evaporative Canister Bleed Test Comments	--						
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--				
CARB Fuel Only (Rig) Test Comments	--						
Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description				
VFJXR01165AC-5AC	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
Subaru Corporation	1 - Subaru	10 - BRZ	California + CAA Section 177 states	2-Wheel Drive, Rear	Manual	6	No
Toyota Motor Corporation	1 - TOYOTA	320 - GR86	Federal	2-Wheel Drive, Rear	Manual	6	No
Toyota Motor Corporation	1 - TOYOTA	320 - GR86	California + CAA Section 177 states	2-Wheel Drive, Rear	Semi-Automatic	6	Yes
Subaru Corporation	1 - Subaru	10 - BRZ	Federal	2-Wheel Drive, Rear	Manual	6	No
Subaru Corporation	1 - Subaru	10 - BRZ	Federal	2-Wheel Drive, Rear	Semi-Automatic	6	Yes
Toyota Motor Corporation	1 - TOYOTA	320 - GR86	Federal	2-Wheel Drive, Rear	Semi-Automatic	6	Yes
Toyota Motor Corporation	1 - TOYOTA	320 - GR86	California + CAA Section 177 states	2-Wheel Drive, Rear	Manual	6	No
Subaru Corporation	1 - Subaru	10 - BRZ	California + CAA Section 177 states	2-Wheel Drive, Rear	Semi-Automatic	6	Yes

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC	
Engine Description				
Hybrid Type	--	Hybrid Description	--	
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--	
Engine Block Arrangement	Horizontally Opposed	Mfr Engine Block Arrangement Description	--	
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	ILSAC GF-7A 0W-20	
Number of Cylinders/Rotors	4	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
Mfr After Treatment Device (ATD) Comments				
--				
Direct Ozone Reduction (DOR) Device				
Not Equipped				
Mfr Emission Control Device Comments				
--				
Engine Configuration Number 1				
Engine Displacement (liters)	2.4	Engine Rated Horsepower	228	
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2	
Air Aspiration Method	Naturally Aspirated	Number of Air Aspiration Devices	--	
Air Aspiration Device Configuration	--	Charge Air Cooler Type	--	
Air Aspiration Drive Method(s)	Mechanical			
Cylinder Deactivation	No			
Cylinder Deactivation Description	--			
Variable Valve Timing	Yes			
Variable Valve Timing System Description	Intake and Exhaust			
Variable Valve Lift?	No			
Variable Valve Lift System Description	--			
Number of Knock Sensors	2	Number of Air/Fuel Sensors	2	
Air/Fuel Sensor # 1 Type	Heated air fuel	Air/Fuel Sensor # 1 Description	--	
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--	
Mfr Air/Fuel Sensor Comments	--			
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No	
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--	
Closed Loop Air Injection System	No			
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--	
Mfr Engine Configuration Comments	--			

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family		VFJXR01165AC			
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		NFJX10068306	NFJX10068308	NFJX10068309	NFJX10068311	NFJX10068307	--	228.2	--	286.1	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	NBE-MZ42 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	NFJXV02.4AJM	Original Evaporative/Refueling Family	NFJXR01165AC
Original Test Vehicle Model Year	2022		
Vehicle Model			
Represented Test Vehicle Make	SUBARU	Represented Test Vehicle Model	BRZ

Leak Family Details

Leak Family Identifier	5AC	Leak Family Name	NFJXR01165AC-5AC
-------------------------------	-----	-------------------------	------------------

Drive Sources and Fuel System Details

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9948
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Kilometers		
Engine Code	24BNP1	Rated Horsepower	228
Displacement (liters)	2.4		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	2868	Equivalent Test Weight (pounds)	3250
GVWR (lbs)	3748	N/V Ratio	31.8
Axle Ratio	3.91		
Transmission Type	Semi-Automatic	# of Transmission Gears	6
Transmission Lockup	Yes	Creep Gear	No

Dynamometer Coefficients:

Target Coefficients				Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	35.38	0.2596	0.01749	17.19	0.0836	0.01714	12.3
US06	35.38	0.2596	0.01749	17.19	0.0836	0.01714	N/A

Page 6 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068306	Test Procedure	25 - California fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	12/29/2020	Fuel	Gasoline
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7337	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)	354.870279	--
FE BAG 1 (Bag 1 Fuel Economy)	24.292123	24.292123
CO2 BAG 2 (Bag 2 Carbon Dioxide)	382.327519	--
FE BAG 2 (Bag 2 Fuel Economy)	22.629868	22.629868
CO2 BAG 3 (Bag 3 Carbon Dioxide)	298.101404	--
FE BAG 3 (Bag 3 Fuel Economy)	29.00548	29.00548
METHANE (CH4 - Methane)	0.002963	--
CO (Carbon Monoxide)	0.254073	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.41	--
DT-EER (Drive Trace Energy Economy Rating)	0.12	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.09	--
HCHO (Formaldehyde)	0.00003	--
MFR FE (Manufacturer Fuel Economy)	24.488166	24.488166
NOX (Nitrogen Oxide)	0.00992	--
N2O (Nitrous Oxide)	0.001292	--
HC-NM (Non-methane Hydrocarbon)	0.009022	--
NMOG (Non-methane organic gases)	0.009924	--
PM (Particulate Matter)	0.000204	--
HC-TOTAL (Total Hydrocarbon)	0.011851	--

Page 8 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family					VFJXR01165AC		
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	120,000 miles	Federal Tier 3 Bin 125	CREE	999	--	--	--	0.8	--	1000	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	OPT-CREE	999	--	--	--	1.5	--	1000	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.25	--	--	--	0.5	--	0.8	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO-COMP	0.77	--	--	--	0.5	--	0.8	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	HCHO	0	--	--	--	0	--	0	0.004	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	METHANE	0.003	--	--	--	0.0047	--	0.008	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	N2O	0.0013	--	--	--	0.0007	--	0.002	0.014	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0099	--	1.1	--	0.0068	--	0.017	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0198	--	1.1	--	--	--	0.028	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX-COMP	0.0398	--	1.03	--	--	--	0.04	0.110	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0099	--	--	--	0.0014	--	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0002	--	--	--	0.0002	--	0	0.003	Pass
CA	120,000 miles	California LEV-IV ULEV125	CREE	999	--	--	--	0.8	--	1000	--	--
CA	120,000 miles	California LEV-IV ULEV125	OPT-CREE	999	--	--	--	1.5	--	1000	--	--
CA	150,000 miles	California LEV-IV ULEV125	CO	0.25	--	--	--	0.5	--	0.8	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	HCHO	0	--	--	--	0	--	0	0.004	Pass
CA	150,000 miles	California LEV-IV ULEV125	METHANE	0.003	--	--	--	0.0047	--	0.008	0.030	Pass
CA	150,000 miles	California LEV-IV ULEV125	N2O	0.0013	--	--	--	0.0007	--	0.002	0.014	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0099	--	1.1	--	0.0068	--	0.017	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0198	--	1.1	--	--	--	0.028	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0099	--	--	--	0.0014	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0002	--	--	--	0.0002	--	0	0.001	Pass

Page 10 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068310	Test Procedure	51 - CA fuel 50 Deg(F) exhaust test
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	01/13/2021	Fuel	Gasoline
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7441	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)	385.916202	--
FE BAG 1 (Bag 1 Fuel Economy)	22.284587	22.284587
CO2 BAG 2 (Bag 2 Carbon Dioxide)	387.26084	--
FE BAG 2 (Bag 2 Fuel Economy)	22.342235	22.342235
CO2 BAG 3 (Bag 3 Carbon Dioxide)	302.893112	--
FE BAG 3 (Bag 3 Fuel Economy)	28.524751	28.524751
METHANE (CH4 - Methane)	0.003902	--
CO (Carbon Monoxide)	0.414808	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.62	--
DT-EER (Drive Trace Energy Economy Rating)	-0.03	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.24	--
HCHO (Formaldehyde)	0.000027	--
MFR FE (Manufacturer Fuel Economy)	23.731042	23.731042
NOX (Nitrogen Oxide)	0.010364	--
N2O (Nitrous Oxide)	0.000481	--
HC-NM (Non-methane Hydrocarbon)	0.016395	--
NMOG (Non-methane organic gases)	0.018034	--
HC-TOTAL (Total Hydrocarbon)	0.020011	--

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family				VFJXR01165AC		
		Test Result Name		Unrounded Test Result		Verify Calculated CREE/OPT-CREE						
		Carbon-Related Exhaust Emissions		364.704623		--						
		Optional Carbon-Related Exhaust Emissions		364.940231		--						
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		363.798811		--						
Manufacturer Test Comments		215/40R18										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
CA	4,000 miles	California LEV-IV ULEV125	CO	0.41	--	--	--	--	--	0.4	2.1	Pass
CA	4,000 miles	California LEV-IV ULEV125	HCHO	0	--	--	--	--	--	0	0.016	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG	0.018	--	1.1	--	--	--	0.018	999.999	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0284	--	1.1	--	--	--	0.028	0.250	Pass
CA	4,000 miles	California LEV-IV ULEV125	NOX	0.0104	--	--	--	--	--	0.01	999.999	Pass

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068307	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	12/29/2020	Fuel	Gasoline
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7355	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)
METHANE (CH4 - Methane)	0.000855	--
CO (Carbon Monoxide)	0.111719	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3	--
DT-EER (Drive Trace Energy Economy Rating)	-0.04	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.63	--
HCHO (Formaldehyde)	0.000002	--
MFR FE (Manufacturer Fuel Economy)	42.181036	42.181036
NOX (Nitrogen Oxide)	0.001332	--
N2O (Nitrous Oxide)	0.000297	--
HC-NM (Non-methane Hydrocarbon)	0.002485	--
NMOG (Non-methane organic gases)	0.00256	--
HC-TOTAL (Total Hydrocarbon)	0.003301	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	205.182795	999
Optional Carbon-Related Exhaust Emissions	205.292274	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	204.758545	--

Manufacturer Test Comments

215/40R18

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family					VFJXR01165AC		
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	120,000 miles	Federal Tier 3 Bin 125	CREE	999	--	--	--	0.7	--	1000	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	OPT-CREE	999	--	--	--	2.4	--	1001	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0026	--	1.03	--	0.0068	--	0.009	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0039	--	1.03	--	--	--	0.012	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0013	--	--	--	0.0014	--	0.003	999.999	Pass
CA	120,000 miles	California LEV-IV ULEV125	CREE	999	--	--	--	0.7	--	1000	--	--
CA	120,000 miles	California LEV-IV ULEV125	OPT-CREE	999	--	--	--	2.4	--	1001	--	--
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0026	--	1.03	--	0.0068	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0039	--	1.03	--	--	--	0.012	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0013	--	--	--	0.0014	--	0.003	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	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068308	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	12/29/2020	Fuel	Gasoline
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7392	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)
METHANE (CH4 - Methane)	0.007763	--
CO (Carbon Monoxide)	0.634921	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.26	--
DT-EER (Drive Trace Energy Economy Rating)	-0.06	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.25	--
MFR FE (Manufacturer Fuel Economy)	29.322181	29.322181
NOX (Nitrogen Oxide)	0.022857	--
N2O (Nitrous Oxide)	0.001438	--
HC-NM (Non-methane Hydrocarbon)	0.04976	--
NMOG (Non-methane organic gases)	0.051253	--
PM (Particulate Matter)	0.000351	--
HC-TOTAL (Total Hydrocarbon)	0.057172	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	295.162797	--
Optional Carbon-Related Exhaust Emissions	295.752607	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	294.220175	--

Manufacturer Test Comments 215/40R18

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family				VFJXR01165AC		
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 125	CO	0.6349	--	--	--	0.5	--	1.135	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0513	--	1.03	--	0.0068	--	0.058	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0742	--	1.03	--	--	--	0.082	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0229	--	--	--	0.0014	--	0.024	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0004	--	--	--	0.0002	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.63	--	--	--	0.5	--	1.1	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0513	--	1.03	--	0.0068	--	0.058	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0742	--	1.03	--	--	--	0.082	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0229	--	--	--	0.0014	--	0.024	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0004	--	--	--	0.0002	--	0.001	0.006	Pass

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068309	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	01/11/2021	Fuel	Gasoline
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7417	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)
METHANE (CH4 - Methane)	0.00229	--
CO (Carbon Monoxide)	0.018398	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.41	--
DT-EER (Drive Trace Energy Economy Rating)	-0.14	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.03	--
MFR FE (Manufacturer Fuel Economy)	21.106932	21.106932
NOX (Nitrogen Oxide)	0.007618	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.002854	--
NMOG (Non-methane organic gases)	0.00294	--
HC-TOTAL (Total Hydrocarbon)	0.005033	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	410.046548	--
Optional Carbon-Related Exhaust Emissions	410.097694	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	409.656802	--

Manufacturer Test Comments 215/40R18

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family				VFJXR01165AC		
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 125	CO	0.0184	--	--	--	0.5	--	0.518	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0029	--	1.03	--	0.0068	--	0.01	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0105	--	1.03	--	--	--	0.019	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0076	--	--	--	0.0014	--	0.009	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.02	--	--	--	0.5	--	0.5	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0029	--	1.03	--	0.0068	--	0.01	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0105	--	1.03	--	--	--	0.019	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0076	--	--	--	0.0014	--	0.009	999.999	Pass

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC						
Emission Data Vehicle Information									
Vehicle ID / Configuration	NBE-MZ42 / 1	Manufacturer Vehicle Configuration Number	1						
Original Test Group Name	NFJXV02.4AJM	Original Evaporative/Refueling Family	NFJXR01165AC						
Original Test Vehicle Model Year	2022								
Vehicle Model									
Represented Test Vehicle Make	SUBARU	Represented Test Vehicle Model	BRZ						
Leak Family Details									
Leak Family Identifier	5AC	Leak Family Name	NFJXR01165AC-5AC						
Drive Sources and Fuel System Details									
	<table><tr><th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr><tr><td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr></table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9948						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Kilometers								
Engine Code	24BNP1	Rated Horsepower	228						
Displacement (liters)	2.4								
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--						
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	2868	Equivalent Test Weight (pounds)	3250						
GVWR (lbs)	3748	N/V Ratio	31.8						
Axle Ratio	3.91								
Transmission Type	Semi-Automatic	# of Transmission Gears	6						
Transmission Lockup	Yes	Creeper Gear	No						
Dynamometer Coefficients:									
	Target Coefficients		Set Coefficients						
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients		
Cold CO	38.92	0.2856	0.01924	15.19	0.0261	0.01918	N/A		
Emission Control Device Comments									
--									

Page 20 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068311	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	01/15/2021	Fuel	Gasoline
Fuel Batch ID	URAE02	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	7471	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)	472.731706	--
FE BAG 1 (Bag 1 Fuel Economy)	18.127716	18.127716
CO2 BAG 2 (Bag 2 Carbon Dioxide)	432.881775	--
FE BAG 2 (Bag 2 Fuel Economy)	20.069892	20.069892
CO2 BAG 3 (Bag 3 Carbon Dioxide)	335.395873	--
FE BAG 3 (Bag 3 Fuel Economy)	25.902803	25.902803
METHANE (CH4 - Methane)	0.010592	--
CO (Carbon Monoxide)	0.801988	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1	--
DT-EER (Drive Trace Energy Economy Rating)	-0.11	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.69	--
MFR FE (Manufacturer Fuel Economy)	20.916918	20.916918
NOX (Nitrogen Oxide)	0.014263	--
N2O (Nitrous Oxide)	0.000394	--
HC-NM (Non-methane Hydrocarbon)	0.07897	--
NMOG (Non-methane organic gases)	0.086867	--
HC-TOTAL (Total Hydrocarbon)	0.088966	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	415.526408	--
Optional Carbon-Related Exhaust Emissions	415.880315	--

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family				VFJXR01165AC		
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		414.357465			--					
Manufacturer Test Comments		215/40R18										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 125	CO	0.8	--	--	--	0.16	--	1	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	HC-NM	0.08	--	--	--	0	--	0.1	0.6	Pass
CA	50,000 miles	California LEV-IV ULEV125	CO	0.8	--	--	--	0.16	--	1	10.0	Pass

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	NBF-MZ42 / 3	Manufacturer Vehicle Configuration Number	3
Original Test Group Name	NFJXV02.4AJM	Original Evaporative/Refueling Family	NFJXR01165AC
Original Test Vehicle Model Year	2022		

Vehicle Model

Represented Test Vehicle Make	SUBARU	Represented Test Vehicle Model	BRZ
--------------------------------------	--------	---------------------------------------	-----

Leak Family Details

Leak Family Identifier	5AC	Leak Family Name	NFJXR01165AC-5AC
-------------------------------	-----	-------------------------	------------------

Drive Sources and Fuel System Details

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

Hybrid Indicator	No		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9816
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	24BNP1	Rated Horsepower	228
Displacement (liters)	2.4		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	2868	Equivalent Test Weight (pounds)	3250
GVWR (lbs)	3748	N/V Ratio	31.8
Axle Ratio	3.91		
Transmission Type	Semi-Automatic	# of Transmission Gears	6
Transmission Lockup	Yes	Creep Gear	No

Dynamometer Coefficients:

Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	35.38	0.2596	0.01749	18.59	0.014	0.01813	12.3

Emission Control Device Comments --

Page 24 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068254	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	12/24/2020	Fuel	Gasoline
Fuel Batch ID	UADE11	Fuel Calibration Number	1
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4941	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	359.510866	--
FE BAG 1 (Bag 1 Fuel Economy)	24.610076	24.610076
CO2 BAG 2 (Bag 2 Carbon Dioxide)	387.131789	--
FE BAG 2 (Bag 2 Fuel Economy)	22.976447	22.976447
CO2 BAG 3 (Bag 3 Carbon Dioxide)	299.299204	--
FE BAG 3 (Bag 3 Fuel Economy)	29.677941	29.677941
METHANE (CH4 - Methane)	0.005836	--
CO (Carbon Monoxide)	0.342341	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.96	--
DT-EER (Drive Trace Energy Economy Rating)	0.3	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.54	--
MFR FE (Manufacturer Fuel Economy)	24.880232	24.880232
NOX (Nitrogen Oxide)	0.011369	--
N2O (Nitrous Oxide)	0.00192	--
HC-NM (Non-methane Hydrocarbon)	0.013009	--
NMOG (Non-methane organic gases)	0.013529	--
HC-TOTAL (Total Hydrocarbon)	0.018582	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	357.593142	358
Optional Carbon-Related Exhaust Emissions	358.286578	358

Certification Summary Information Report

Test Group		VFJXV02.4AJM				Evaporative/Refueling Family				VFJXR01165AC			
		Test Result Name		Unrounded Test Result		Verify Calculated CO2							
		Carbon dioxide		357.274067		--							
Manufacturer Test Comments		WORST Manual Shift											
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	120,000 miles	Federal Tier 3 Bin 125	CREE	358	--	--	--	0.8	--	359	--	--	
Fed	120,000 miles	Federal Tier 3 Bin 125	OPT-CREE	358	--	--	--	1.5	--	360	--	--	
Fed	150,000 miles	Federal Tier 3 Bin 125	METHANE	0.0058	--	--	--	0.0047	--	0.01	0.030	Pass	
Fed	150,000 miles	Federal Tier 3 Bin 125	N2O	0.0019	--	--	--	0.0007	--	0.003	0.014	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	VFJXV02.4AJM		Evaporative/Refueling Family	VFJXR01165AC																							
Emission Data Vehicle Information																											
Vehicle ID / Configuration	NBV-MZ42 / 0		Manufacturer Vehicle Configuration Number	0																							
Original Test Group Name	NFJXV02.4AJM		Original Evaporative/Refueling Family	NFJXR01165AC																							
Original Test Vehicle Model Year	2022																										
Vehicle Model																											
Represented Test Vehicle Make	SUBARU		Represented Test Vehicle Model	BRZ																							
Leak Family Details																											
Leak Family Identifier	5AC		Leak Family Name	NFJXR01165AC-5AC																							
Drive Sources and Fuel System Details																											
<table border="1"> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </table>						Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline																
Drive Source and Fuel#	Drive Source	Fuel																									
1	Combustion Engine	Gasoline																									
Hybrid Indicator	No		Multiple Fuel Combustion	--																							
Multiple Fuel Storage	--		Rechargeable Energy Storage System Indicator	--																							
Fuel Cell Indicator	--		Rechargeable Energy Storage System, if 'Other'	--																							
Rechargeable Energy Storage System	--																										
Off-board charge Capable Indicator	--																										
Odometer Correction -- Initial	0		Odometer Correction Factor	0.9949																							
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor																										
Odometer Correction Units	Kilometers																										
Engine Code	24BNP1		Rated Horsepower	228																							
Displacement (liters)	2.4		Air Aspiration Method, if 'Other'																								
Air Aspiration Method	Naturally Aspirated		Air Aspiration Device Configuration	--																							
Number of Air Aspiration Devices	0		Drive Mode While Testing	2-Wheel Drive, Rear																							
Charge Air Cooler Type	N/A		Aged Emission Components	4,000 (mi)																							
Shift Indicator Light Usage	Equipped, not shifted by SIL		Equivalent Test Weight (pounds)	3250																							
Curb Weight (lbs)	2903		N/V Ratio	31.8																							
GVWR (lbs)	3748																										
Axle Ratio	3.91		# of Transmission Gears	6																							
Transmission Type	Semi-Automatic		Creep Gear	No																							
Transmission Lockup	Yes																										
Dynamometer Coefficients:																											
<table border="1"> <tr> <th colspan="3">Target Coefficients</th> <th colspan="3">Set Coefficients</th> <th rowspan="2">EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients</th> </tr> <tr> <th>Coefficient Category</th> <th>A (lbf)</th> <th>B (lbf/mph)</th> <th>C (lbf/mph**2)</th> <th>A (lbf)</th> <th>B (lbf/mph)</th> <th>C (lbf/mph**2)</th> </tr> <tr> <td>City/Highway/Evap</td> <td>35.38</td> <td>0.2596</td> <td>0.01749</td> <td>17.69</td> <td>0.0519</td> <td>0.01749</td> <td>12.3</td> </tr> </table>						Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	City/Highway/Evap	35.38	0.2596	0.01749	17.69	0.0519	0.01749	12.3
Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients																					
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)		C (lbf/mph**2)																				
City/Highway/Evap	35.38	0.2596	0.01749	17.69	0.0519	0.01749	12.3																				
Emission Control Device Comments	--																										

Page 28 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068279	Test Procedure	25 - California fuel 2-day exhaust (w/can load)
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	11/19/2020	Fuel	N/A
Fuel Batch ID	UPAE03	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	6410	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)	325.515569	--
FE BAG 1 (Bag 1 Fuel Economy)	26.478523	26.478523
CO2 BAG 2 (Bag 2 Carbon Dioxide)	321.579687	--
FE BAG 2 (Bag 2 Fuel Economy)	26.911378	26.911378
CO2 BAG 3 (Bag 3 Carbon Dioxide)	264.458553	--
FE BAG 3 (Bag 3 Fuel Economy)	32.701042	32.701042
METHANE (CH4 - Methane)	0.003194	--
CO (Carbon Monoxide)	0.195808	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.44	--
DT-EER (Drive Trace Energy Economy Rating)	-0.07	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.48	--
MFR FE (Manufacturer Fuel Economy)	28.159038	28.159038
NOX (Nitrogen Oxide)	0.013038	--
N2O (Nitrous Oxide)	0.000376	--
HC-NM (Non-methane Hydrocarbon)	0.010455	--
NMOG (Non-methane organic gases)	0.011501	--
PM (Particulate Matter)	0.000172	--
HC-TOTAL (Total Hydrocarbon)	0.013513	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CREE/OPT-CREE</td></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>307.355046</td><td>999</td></tr><tr><td>Optional Carbon-Related Exhaust Emissions</td><td>307.545169</td><td>999</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	307.355046	999	Optional Carbon-Related Exhaust Emissions	307.545169	999		
	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE									
	Carbon-Related Exhaust Emissions	307.355046	999									
	Optional Carbon-Related Exhaust Emissions	307.545169	999									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated CO2</td></tr><tr><td>Carbon dioxide</td><td>306.708188</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	306.708188	--					
Test Result Name	Unrounded Test Result	Verify Calculated CO2										
Carbon dioxide	306.708188	--										
Manufacturer Test Comments	215/40R18											

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068281	Test Procedure	35 - California fuel 3-day exhaust
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	11/24/2020	Fuel	N/A
Fuel Batch ID	UPAE04	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	6440	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)	318.442019	--
FE BAG 1 (Bag 1 Fuel Economy)	27.038408	27.038408
CO2 BAG 2 (Bag 2 Carbon Dioxide)	321.431932	--
FE BAG 2 (Bag 2 Fuel Economy)	26.925685	26.925685
CO2 BAG 3 (Bag 3 Carbon Dioxide)	267.865399	--
FE BAG 3 (Bag 3 Fuel Economy)	32.280545	32.280545
METHANE (CH4 - Methane)	0.003648	--
CO (Carbon Monoxide)	0.23481	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.08	--
DT-EER (Drive Trace Energy Economy Rating)	-0.16	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.02	--
MFR FE (Manufacturer Fuel Economy)	28.246468	28.246468
NOX (Nitrogen Oxide)	0.016427	--
N2O (Nitrous Oxide)	0.000355	--
HC-NM (Non-methane Hydrocarbon)	0.010469	--
NMOG (Non-methane organic gases)	0.011516	--
PM (Particulate Matter)	0.000214	--
HC-TOTAL (Total Hydrocarbon)	0.013962	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
-------------------	--------------	-------------------------------------	--------------

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	306.403689	999
Optional Carbon-Related Exhaust Emissions	306.602299	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	306.109889	--

Manufacturer Test Comments 215/40R18

Test #	NFJX10068288	Test Procedure	38 - CA fuel 3-day evap.
Exhaust Test # for this Evap Test	NFJX10068281	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline
Test Date	12/10/2020	Fuel	Gasoline
Fuel Batch ID	HF0862	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	6670	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)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.195124	--

Manufacturer Test Comments 215/40R18

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	0.1951	0.0061	0.201	0.3	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1951	0.0061	0.201	0.3	Pass

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC						
Test #	NFJX10068289	Test Procedure	27 - California fuel 2-day evap						
Exhaust Test # for this Evap Test	NFJX10068279	Test Fuel Type	47 - CARB LEV3 E10 Premium						
Test Date	12/04/2020	Fuel	Gasoline						
Fuel Batch ID	HF0862	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	3-9-6, Osawa								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	6580	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									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.17829</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.17829	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.17829	--							
Manufacturer Test Comments 215/40R18									
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	0.1783	0.0061	0.184	0.3	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1783	0.0061	0.184	0.3	Pass	

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC						
Test #	NFJX10068283	Test Procedure	37 - California Fuel Running Loss						
Exhaust Test # for this Evap Test	NFJX10068281	Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline						
Test Date	12/10/2020	Fuel	Gasoline						
Fuel Batch ID	HF0862	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	3-9-6, Osawa								
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)								
Test Start Odometer Reading	6642	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									
<table border="1"> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value (miles per gallon)</th> </tr> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.000018</td> <td>--</td> </tr> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.000018	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.000018	--							
Manufacturer Test Comments 215/40R18									
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail	
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0	0	0	0.05	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0	0	0	0.01	Pass	

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068284	Test Procedure	65 - Evap Canister Bleed Test
Exhaust Test # for this Evap Test	--	Test Fuel Type	47 - CARB LEV3 E10 Premium
Test Date	12/08/2020	Fuel	Gasoline
Fuel Batch ID	HF0862	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	6612	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)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.004825	--

Manufacturer Test Comments 215/40R18

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

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
-------------------	--------------	-------------------------------------	--------------

Emission Data Vehicle Information

Vehicle ID / Configuration	NBV-MZ42 / 1	Manufacturer Vehicle Configuration Number	1
Original Test Group Name	NFJXV02.4AJM	Original Evaporative/Refueling Family	NFJXR01165AC
Original Test Vehicle Model Year	2022		

Vehicle Model

Represented Test Vehicle Make	SUBARU	Represented Test Vehicle Model	BRZ
--------------------------------------	--------	---------------------------------------	-----

Leak Family Details

Leak Family Identifier	5AC	Leak Family Name	NFJXR01165AC-5AC
-------------------------------	-----	-------------------------	------------------

Drive Sources and Fuel System Details

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

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.9949
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Kilometers		
Engine Code	24BNP1	Rated Horsepower	228
Displacement (liters)	2.4		
Air Aspiration Method	Naturally Aspirated	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	0	Air Aspiration Device Configuration	--
Charge Air Cooler Type	N/A	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Equipped, not shifted by SIL	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	2903	Equivalent Test Weight (pounds)	3250
GVWR (lbs)	3748	N/V Ratio	31.8
Axle Ratio	3.91		
Transmission Type	Semi-Automatic	# of Transmission Gears	6
Transmission Lockup	Yes	Creep Gear	No

Dynamometer Coefficients:

Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients	
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	35.38	0.2596	0.01749	14.18	0.0759	0.01768	12.3

Emission Control Device Comments --

Page 37 of 53 CSI Submission/Revision Date: 04/23/2026 05:03:33 AM

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Test #	NFJX10068290	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	01/12/2021	Fuel	N/A
Fuel Batch ID	UTAE01	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	6821	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)	328.561895	--
FE BAG 1 (Bag 1 Fuel Economy)	26.284835	26.284835
CO2 BAG 2 (Bag 2 Carbon Dioxide)	315.14109	--
FE BAG 2 (Bag 2 Fuel Economy)	27.502632	27.502632
CO2 BAG 3 (Bag 3 Carbon Dioxide)	263.640831	--
FE BAG 3 (Bag 3 Fuel Economy)	32.852822	32.852822
METHANE (CH4 - Methane)	0.003707	--
CO (Carbon Monoxide)	0.179918	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.06	--
DT-EER (Drive Trace Energy Economy Rating)	-0.27	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.02	--
MFR FE (Manufacturer Fuel Economy)	28.483026	28.483026
NOX (Nitrogen Oxide)	0.019817	--
N2O (Nitrous Oxide)	0.000934	--
HC-NM (Non-methane Hydrocarbon)	0.009889	--
NMOG (Non-methane organic gases)	0.010875	--
PM (Particulate Matter)	0.000161	--
HC-TOTAL (Total Hydrocarbon)	0.013428	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
-------------------	--------------	-------------------------------------	--------------

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	304.323324	999
Optional Carbon-Related Exhaust Emissions	304.673434	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	303.775098	--

Manufacturer Test Comments 215/40R18

Test #	NFJX10068291	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	NFJX10068290	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	12/25/2020	Fuel	Gasoline
Fuel Batch ID	HF2042	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	3-9-6, Osawa		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	6760	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)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.00568	--

Manufacturer Test Comments 215/40R18

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	0.006	0.004	0.01	0.2	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.006	0.004	0.01	0.2	Pass

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Fuel Properties			
Fuel Batch ID	HF2042	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	09/24/2020
Fuel Batch Calibration Effective Date	12/22/2020	Fuel Batch Calibration Ineffective Date	01/22/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.826	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.744
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17826
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	UPAE05	Fuel Calibration Number	1
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	02/21/2018
Fuel Batch Calibration Effective Date	12/25/2020	Fuel Batch Calibration Ineffective Date	01/25/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.826	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17874
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	HF0862	Fuel Calibration Number	1
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	08/16/2018
Fuel Batch Calibration Effective Date	11/26/2020	Fuel Batch Calibration Ineffective Date	12/26/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.828	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.745
Fuel Ethanol Volume Percent (%)	9.3	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17872
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.828	Weight Fraction CO2	--
Fuel Batch ID	URAE02	Fuel Calibration Number	1
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	11/06/2015
Fuel Batch Calibration Effective Date	01/13/2021	Fuel Batch Calibration Ineffective Date	02/13/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.827	Fuel Methanol Volume Fraction	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17783
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	UTAE01	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	09/24/2020
Fuel Batch Calibration Effective Date	12/22/2020	Fuel Batch Calibration Ineffective Date	01/22/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.826	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17828
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	UPAE03	Fuel Calibration Number	1
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	02/21/2018
Fuel Batch Calibration Effective Date	11/03/2020	Fuel Batch Calibration Ineffective Date	12/03/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.826	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17874
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	UPAE04	Fuel Calibration Number	1
Test Fuel Type	47 - CARB LEV3 E10 Premium Gasoline	Fuel Batch Calibration Date	02/21/2018
Fuel Batch Calibration Effective Date	11/23/2020	Fuel Batch Calibration Ineffective Date	12/23/2020
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.826	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17874
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--

Certification Summary Information Report

Test Group	VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
Fuel Batch ID	UADE11	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	01/24/2018
Fuel Batch Calibration Effective Date	12/23/2020	Fuel Batch Calibration Ineffective Date	01/23/2021
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	0.866	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.742
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18457
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		VFJXV02.4AJM			Evaporative/Refueling Family			VFJXR01165AC	
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 125	
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	--	--	--	--	--	--	0.5	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.006
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
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	--	--	--	--	--	--	0.5	9.6
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	0.150
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.006
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 125	
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
120,000 miles	CREE	--	--	--	--	--	--	0.8	999.999
120,000 miles	OPT-CREE	--	--	--	--	--	--	1.5	999.999
150,000 miles	METHANE	--	--	--	--	--	--	0.0047	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.014

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family			VFJXR01165AC	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 125	
Fuel		Gasoline			Test Procedure			California 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
120,000 miles	CREE	--	--	--	--	--	--	0.8	999.999
120,000 miles	OPT-CREE	--	--	--	--	--	--	1.5	999.999
150,000 miles	CO	--	--	--	--	--	--	0.5	2.1
150,000 miles	CO-COMP	--	--	--	--	--	--	0.5	4.2
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0.0047	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.014
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	1	--	0.125
150,000 miles	NMOG+NOX-COMP	--	--	1.03	--	--	--	--	0.110
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.003
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
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	--	--	--	--	--	--	0.5	2.1
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family			VFJXR01165AC	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
Fuel		Gasoline			Test Procedure			California 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
120,000 miles	CREE	--	--	--	--	--	--	0.8	999.999
120,000 miles	OPT-CREE	--	--	--	--	--	--	1.5	999.999
150,000 miles	CO	--	--	--	--	--	--	0.5	2.1
150,000 miles	HCHO	--	--	--	--	--	--	0	0.004
150,000 miles	METHANE	--	--	--	--	--	--	0.0047	0.030
150,000 miles	N2O	--	--	--	--	--	--	0.0007	0.014
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999
150,000 miles	PM	--	--	--	--	--	--	0.0002	0.001
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 125	
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	--	--	--	--	--	--	0.5	999.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family			VFJXR01165AC	
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 125	
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
120,000 miles	CREE	--	--	--	--	--	--	0.7	999.9999
120,000 miles	OPT-CREE	--	--	--	--	--	--	2.4	999.9999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999
Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 125	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.16	10.0
120,000 miles	HC-NM	--	--	--	--	--	--	0	0.6
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
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
120,000 miles	CREE	--	--	--	--	--	--	0.7	999.999
120,000 miles	OPT-CREE	--	--	--	--	--	--	2.4	999.9999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0068	999.999
150,000 miles	NMOG+NOX	--	--	1.03	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0014	999.999

Certification Summary Information Report

Test Group		VFJXV02.4AJM			Evaporative/Refueling Family			VFJXR01165AC	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
Fuel		Gasoline			Test Procedure			CA fuel 50 Deg(F) exhaust test	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
4,000 miles	CO	--	--	--	--	--	--	--	2.1
4,000 miles	HCHO	--	--	--	--	--	--	--	0.016
4,000 miles	NMOG	--	--	1.1	--	--	--	--	999.999
4,000 miles	NMOG+NOX	--	--	1.1	--	--	1	--	0.250
4,000 miles	NOX	--	--	--	--	--	--	--	999.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV ULEV125	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.16	10.0

Evaporative/Refueling Standards

Evaporative/Refueling Family		VFJXR01165AC		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-TOTAL-EQUIV	--	0.20	0.004		

Evaporative/Refueling Family		VFJXR01165AC		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--		0.020	0	

Certification Summary Information Report

Test Group		VFJXV02.4AJM		Evaporative/Refueling Family		VFJXR01165AC	
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0		
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		California fuel 2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0061		
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		California 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		VFJXR01165AC		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		California fuel 2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0061		
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		Federal	
Cert/In-Use Code		Cert		Standard Level		Federal Tier 3 Evap	
Test Procedure		CA fuel 3-day evap.					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0061		

Certification Summary Information Report

Test Group		VFJXV02.4AJM		Evaporative/Refueling Family		VFJXR01165AC	
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		CA fuel 3-day evap.					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.300	0.0061		
Evaporative/Refueling Family		VFJXR01165AC		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Cert		Standard Level		California LEV-IV Zero Evap (Option 2)	
Test Procedure		California Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.01	0		
Evaporative/Refueling Family		VFJXR01165AC		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-TOTAL-EQUIV	--	0.20	0.004		

Certification Summary Information Report

Test Group		VFJXV02.4AJM	Evaporative/Refueling Family	VFJXR01165AC
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		VFJXV02.4AJM	Evaporative/Refueling Family		VFJXR01165AC
ACT-DISTANCE	Actual Distance Driven (miles)		WATT-HRS BAG 3	Bag 3 Watt Hours	
AS-VOLT	Average System Voltage		WATT-HRS BAG 4	Bag 4 Watt Hours	
CO2 BAG 1	Bag 1 Carbon Dioxide		WATT-HRS	Watt Hours	
CO2 BAG 2	Bag 2 Carbon Dioxide		HC-NM BAG 1	Bag 1 Non-methane Hydrocarbon	
CO2 BAG 3	Bag 3 Carbon Dioxide		HC-NM BAG 2	Bag 2 Non-methane Hydrocarbon	
CO2 BAG 4	Bag 4 Carbon Dioxide		HC-NM BAG 3	Bag 3 Non-methane Hydrocarbon	
NMOG+NOX	Non-methane organic gases plus Nitrogen Oxides		HC-NM BAG 4	Bag 4 Non-methane Hydrocarbon	
NMOG+NOX-COMP	SFTP Composite Non-methane Organic Gases + Nitrogen Oxides		N2O BAG 1	Bag 1 Nitrous Oxide	
DT-IWRR	Drive Trace Inertia Work Ratio Rating		N2O BAG 2	Bag 2 Nitrous Oxide	
DT-ASCR	Drive Trace Absolute Speed Change Rating		N2O BAG 3	Bag 3 Nitrous Oxide	
DT-EER	Drive Trace Energy Economy Rating		N2O BAG 4	Bag 4 Nitrous Oxide	
Certification Region					
CA	California + CAA Section 177 states		FA	Federal	
Exhaust Emission Standard Level					
B1	Federal Tier 2 Bin 1		HDV2B340	Federal Tier 3 HD Class 2b Transitional Bin 340	
B2	Federal Tier 2 Bin 2		HDV2B250	Federal Tier 3 HD Class 2b Bin 250	
B3	Federal Tier 2 Bin 3		HDV2B200	Federal Tier 3 HD Class 2b Bin 200	
B4	Federal Tier 2 Bin 4		HDV2B170	Federal Tier 3 HD Class 2b Bin 170	
B5	Federal Tier 2 Bin 5		HDV2B150	Federal Tier 3 HD Class 2b Bin 150	
B6	Federal Tier 2 Bin 6		HDV2B0	Federal Tier 3 HD Class 2b Bin 0	
B7	Federal Tier 2 Bin 7		HDV3B630	Federal Tier 3 HD Class 3 Transitional Bin 630	
B8	Federal Tier 2 Bin 8		HDV3B570	Federal Tier 3 HD Class 3 Transitional Bin 570	
B9	Federal Tier 2 Bin 9		HDV3B400	Federal Tier 3 HD Class 3 Bin 400	
B10	Federal Tier 2 Bin 10		HDV3B270	Federal Tier 3 HD Class 3 Bin 270	
B11	Federal Tier 2 Bin 11		HDV3B230	Federal Tier 3 HD Class 3 Bin 230	
HDV1	HDV1 (Federal HD chassis Class 2b GVW 8501-10000)		HDV3B200	Federal Tier 3 HD Class 3 Bin 200	
HDV2	HDV2 (Federal HD chassis Class 3 GVW 10001-14000)		HDV3B0	Federal Tier 3 HD Class 3 Bin 0	
L2	California LEV-II LEV		L4SULEV100	California LEV-IV SULEV100	
L2OP	California LEV-II LEV Optional		L4SULEV125	California LEV-IV SULEV125	
U2	California LEV-II ULEV		L4SULEV15	California LEV-IV SULEV15	
S2	California LEV-II SULEV		L4SULEV150	California LEV-IV SULEV150	
ZEV	California ZEV		L4SULEV170	California LEV-IV SULEV170	
OT	Other		L4SULEV175	California LEV-IV SULEV175	
T1	Federal Tier 1		L4SULEV20	California LEV-IV SULEV20	
PZEV	California PZEV		L4SULEV200	California LEV-IV SULEV200	
L2LEV160	California LEV-II LEV160		L4SULEV230	California LEV-IV SULEV230	
L2ULEV125	California LEV-II ULEV125		L4SULEV25	California LEV-IV SULEV25	
L2SULEV30	California LEV-II SULEV30		L4SULEV30	California LEV-IV SULEV30	
L2LEV395	California LEV-II LEV395		L4SULEV75	California LEV-IV SULEV75	

Certification Summary Information Report

Test Group		VFJXV02.4AJM	Evaporative/Refueling Family		VFJXR01165AC
L2ULEV340	California LEV-II ULEV340		L4SULEV85	California LEV-IV SULEV85	
L2LEV630	California LEV-II LEV630		L4ULEV125	California LEV-IV ULEV125	
L2ULEV570	California LEV-II ULEV570		L4ULEV200	California LEV-IV ULEV200	
L3LEV160	California LEV-III LEV160		L4ULEV250	California LEV-IV ULEV250	
L3ULEV125	California LEV-III ULEV125		L4ULEV270	California LEV-IV ULEV270	
L3ULEV70	California LEV-III ULEV70		L4ULEV40	California LEV-IV ULEV40	
L3ULEV50	California LEV-III ULEV50		L4ULEV400	California LEV-IV ULEV400	
L3SULEV30	California LEV-III SULEV30		L4ULEV50	California LEV-IV ULEV50	
L3SULEV20	California LEV-III SULEV20		L4ULEV60	California LEV-IV ULEV60	
L3LEV395	California LEV-III LEV395		L4ULEV70	California LEV-IV ULEV70	
L3ULEV340	California LEV-III ULEV340		T4B170	Federal Tier 4 MDV Bin 170	
L3ULEV250	California LEV-III ULEV250		T4B150	Federal Tier 4 MDV Bin 150	
L3ULEV200	California LEV-III ULEV200		T4B125	Federal Tier 4 MDV Bin 125	
L3SULEV170	California LEV-III SULEV170		T4B100	Federal Tier 4 MDV Bin 100	
L3SULEV150	California LEV-III SULEV150		T4B85	Federal Tier 4 MDV Bin 85	
L3LEV630	California LEV-III LEV630		T4B75	Federal Tier 4 MDV Bin 75	
L3ULEV570	California LEV-III ULEV570		T4B70	Federal Tier 4 Bin 70	
L3ULEV400	California LEV-III ULEV400		T4B65	Federal Tier 4 Bin 65	
L3ULEV270	California LEV-III ULEV270		T4B60	Federal Tier 4 Bin 60	
L3SULEV230	California LEV-III SULEV230		T4B55	Federal Tier 4 Bin 55	
L3SULEV200	California LEV-III SULEV200		T4B50	Federal Tier 4 Bin 50	
T3B160	Federal Tier 3 Bin 160		T4B45	Federal Tier 4 Bin 45	
T3B125	Federal Tier 3 Bin 125		T4B40	Federal Tier 4 Bin 40	
T3B110	Federal Tier 3 Transitional Bin 110		T4B35	Federal Tier 4 Bin 35	
T3B85	Federal Tier 3 Transitional Bin 85		T4B30	Federal Tier 4 Bin 30	
T3SULEV30	Federal Tier 3 Transitional LEV-II SULEV30 Carryover		T4B25	Federal Tier 4 Bin 25	
T3B70	Federal Tier 3 Bin 70		T4B20	Federal Tier 4 Bin 20	
T3B50	Federal Tier 3 Bin 50		T4B15	Federal Tier 4 Bin 15	
T3B30	Federal Tier 3 Bin 30		T4B10	Federal Tier 4 Bin 10	
T3B20	Federal Tier 3 Bin 20		T4B5	Federal Tier 4 Bin 5	
T3B0	Federal Tier 3 Bin 0		T4B0	Federal Tier 4 Bin 0	
HDV2B395	Federal Tier 3 HD Class 2b Transitional Bin 395				
Transmission Type Code					
AMS	Automated Manual- Selectable (e.g. Automated Manual with paddles)	M	Manual		
A	Automatic	OT	Other		
AM	Automated Manual	SA	Semi-Automatic		
CVT	Continuously Variable	SCV	Selectable Continuously Variable (e.g. CVT with paddles)		
Drive System Code					
4	4-Wheel Drive	P	Part-time 4-Wheel Drive		

Certification Summary Information Report

Test Group		VFJXV02.4AJM	Evaporative/Refueling Family		VFJXR01165AC
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	