

Certification Summary Information Report

Manufacturer	Volkswagen Group of America, Inc.	Manufacturer Code	VGA
Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Certificate Number	VVGAJ02.0A2H-025-R01	CARB Executive Order #	--
Certificate Issue Date	07/10/2026	Certificate Revision Date	07/15/2026
Certificate Effective Date	07/10/2026	Conditional Certificate	No
CSI Revision #	--	CSI Submission/Revision Date	07/14/2026 03:38:28 PM
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 fuel injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	--
Fuel Cell Indicator	No	EPA Vehicle Class	LDT2, LDV
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	--
Durability Group Name	VVGAGPGNNA3H	Durability Group Equivalency Factor	2.2
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	VVGAJ02.0V3T
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	--		

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	06/30/2026 11:37:29 AM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	HDPE				
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)	171	Number of Primary Canisters	1				
Number of Bleed Canisters	2	Bleed Canister Total Working Capacity (grams)	6				
Mfr Evaporative/Refueling Family Comments	Audi B10 LEV4 Evap FEL 425 BETP Bleeding Canister equipped (2 Honeycombs)						
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				
VVGAR0171ADE-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
Volkswagen Group of America, Inc.	2 - Audi	55 - A5 quattro	California + CAA Section 177 states	All Wheel Drive	Automated Manual-Selectable (e.g. Automated Manual with paddles)	7	No
Volkswagen Group of America, Inc.	2 - Audi	55 - A5 quattro	Federal	All Wheel Drive	Automated Manual-Selectable (e.g. Automated Manual with paddles)	7	No
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	Inline	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W20 VW50800				
Number of Cylinders/Rotors	4	Mechanically Variable Compression Ratio Indicator	N				

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Test Group	VVG AJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Platinum + Palladium + Rhodium	Ceramic
3	Other	Gasoline Particulate Filter	Ceramic
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)	2.0	Engine Rated Horsepower	268
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	1
Air Aspiration Device Configuration	Single	Charge Air Cooler Type	Liquid
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	Electronic / Hydraulic		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	Audi Valve Lift System		
Number of Knock Sensors	1	Number of Air/Fuel Sensors	2
Air/Fuel Sensor # 1 Type	Heated oxygen	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	Yes	Cooled Exhaust Gas Recirculation	No
EGR Type	Variable Valve Timing Control	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Secondary Air Injection	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Applies to both DXCA and DVWA		

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE								
Engine Configuration Number 2											
Engine Displacement (liters)	2.0	Engine Rated Horsepower	268								
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2								
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	1								
Air Aspiration Device Configuration	Single	Charge Air Cooler Type	Liquid								
Air Aspiration Drive Method(s)	Mechanical										
Cylinder Deactivation	No										
Cylinder Deactivation Description	--										
Variable Valve Timing	Yes										
Variable Valve Timing System Description	Electronic / Hydraulic										
Variable Valve Lift?	Yes										
Variable Valve Lift System Description	Audi Valve Lift System										
Number of Knock Sensors	1	Number of Air/Fuel Sensors	2								
Air/Fuel Sensor # 1 Type	Heated oxygen	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	Yes	Cooled Exhaust Gas Recirculation	No								
EGR Type	Variable Valve Timing Control	Exhaust Gas Recirculation Description if 'Other'	--								
Closed Loop Air Injection System	No										
Air Injection Type	Secondary Air Injection	Air Injection Type if 'Other'	--								
Mfr Engine Configuration Comments	Applies to both DXCA and DVWA										
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	TVGA10092282	TVGA10092283	TVGA10092269	TVGA10092284	TVGA10092270	18	16.8	25.4	23.4	--	
SFTP LEV-III Official Test Numbers											
Test Group Fuel	FTP	US06	SC03								
Gasoline	TVGA10092282	TVGA10092283	TVGA10092269								

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE						
Emission Data Vehicle Information									
Vehicle ID / Configuration	SA7H-B10-793 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	SVGAV02.0A7H	Original Evaporative/Refueling Family	SVGAR0171ADE						
Original Test Vehicle Model Year	2025								
Vehicle Model									
Represented Test Vehicle Make	Audi	Represented Test Vehicle Model	A5 quattro						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.0062						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Kilometers								
Engine Code	DXBA	Rated Horsepower	268						
Displacement (liters)	1.984								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single						
Charge Air Cooler Type	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4277	Equivalent Test Weight (pounds)	4500						
GVWR (lbs)	5269	N/V Ratio	24.4						
Axle Ratio	4.41								
Transmission Type	Automated Manual- Selectable (e.g. Automated Manual with paddles)	# of Transmission Gears	7						
Transmission Lockup	No	Creep Gear	No						

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Test Group	VVG AJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	42.56	0.1627	0.02048	2.88	0.2537	0.01774	13.6
Cold CO	46.81	0.179	0.02253	-2.48	0.0042	0.02121	N/A
US06	42.56	0.1627	0.02048	2.88	0.2537	0.01774	N/A

Emission Control Device Comments	DFI/TC/CAC/TWC/WR-HO2S/HO2S
Manufacturer Test Vehicle Comments	MY25 Audi A5 quattro EVAP EDV

Test #	SVGA10089021	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	SVGA10089012	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	11/08/2024	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3356	Odometer Units	M
4WD Test Dyno	Yes	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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.285	--

Manufacturer Test Comments	MY25 Audi A5 quattro Evap EDV E10_2DD
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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	0.285	0	0.285	0.425	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.285	0	0.285	0.425	Pass

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	SVGA10089024	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	SVGA10089014	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	12/06/2024	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3465	Odometer Units	M
4WD Test Dyno	Yes	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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.313	--

Manufacturer Test Comments

MY25 Audi A5 quattro Evap EDV E10_3DD

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	0.313	0	0.313	0.425	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.313	0	0.313	0.425	Pass

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE						
Test #	SVGA10089022	Test Procedure	24 - Federal fuel refueling test (ORVR)						
Exhaust Test # for this Evap Test	SVGA10089013	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)						
Test Date	11/12/2024	Fuel	Gasoline						
Fuel Batch ID	IG0045	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	AUDI AG Ingolstadt								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	3392	Odometer Units	M						
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--						
State of Charge Delta	--								
Drive Cycle Speed Tolerance Criteria	--	Road Speed Fan Usage	--						
Test Results									
<table border="1"> <thead> <tr> <th>Test Result Name</th> <th>Unrounded Test Result</th> <th>Verify Calculated FE Equivalent Value</th> </tr> </thead> <tbody> <tr> <td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td> <td>0.017</td> <td>--</td> </tr> </tbody> </table>				Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.017	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.017	--							
Manufacturer Test Comments									
MY25 Audi A5 quattro Evap EDV E10_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-TOTAL-EQUIV	0.017	0	0.02	0.2	Pass	
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.017	0	0.02	0.2	Pass	

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	SVGA10089023	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	SVGA10089014	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	12/06/2024	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	3448	Odometer Units	M
4WD Test Dyno	Yes	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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

Manufacturer Test Comments MY25 Audi A5 quattro Evap EDV E10_RL

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

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE						
Test #	SVGA10089038	Test Procedure	65 - Evap Canister Bleed Test						
Exhaust Test # for this Evap Test	--	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)						
Test Date	06/24/2024	Fuel	N/A						
Fuel Batch ID	WB0027	Fuel Calibration Number	1						
Vehicle Class	N/A	DF Type	Mfr. Determined						
Verify Test Lab ID	Volkswagen AG WOB2								
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)								
Test Start Odometer Reading	4000	Odometer Units	M						
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--						
State of Charge Delta	--								
Drive Cycle Speed Tolerance Criteria	--	Road Speed Fan Usage	--						
Test Results									
	<table><tr><td>Test Result Name</td><td>Unrounded Test Result</td><td>Verify Calculated FE Equivalent Value</td></tr><tr><td>HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)</td><td>0.0049</td><td>--</td></tr></table>			Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value	HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0049	--
Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value							
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.0049	--							
Manufacturer Test Comments	Audi MY25 B10 BETP								

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE						
Emission Data Vehicle Information									
Vehicle ID / Configuration	TA2H-Q5-531 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	TVGAJ02.0A2H	Original Evaporative/Refueling Family	TVGAR0171ADF						
Original Test Vehicle Model Year	2026								
Vehicle Model									
Represented Test Vehicle Make	Audi	Represented Test Vehicle Model	Q5 TFSI quattro						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <tr> <th>Drive Source and Fuel#</th><th>Drive Source</th><th>Fuel</th></tr> <tr> <td>1</td><td>Combustion Engine</td><td>Gasoline</td></tr> </table>	Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline		
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	1.0053						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Miles								
Engine Code	DXCA	Rated Horsepower	268						
Displacement (liters)	2								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single						
Charge Air Cooler Type	Liquid	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4486	Equivalent Test Weight (pounds)	4750						
GVWR (lbs)	5523	N/V Ratio	26.4						
Axle Ratio	5.3								
Transmission Type	Automated Manual- Selectable (e.g. Automated Manual with paddles)	# of Transmission Gears	7						
Transmission Lockup	No	Creep Gear	No						

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Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family		VVGAR0171ADE	
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	49.2	-0.1428	0.02901	-1.58	0.099	0.02515	15.3	
Cold CO	54.12	-0.1571	0.03191	-5.43	-0.2059	0.02927	N/A	
US06	49.2	-0.1428	0.02901	-1.58	0.099	0.02515	N/A	
Emission Control Device Comments		--						
Manufacturer Test Vehicle Comments		E10 & E0						

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Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092282	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	07/15/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3150	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VVG AJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE																																																																																				
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>392.1391964</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.3269</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>22.1822887</td><td>22.1822887</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0061</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0234</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>428.8325615</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0073</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>20.3145444</td><td>20.3145444</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>354.3101173</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0238</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>24.5851649</td><td>24.5851649</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0013</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0016218</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.0780552</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>1.479132</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.9847868</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>2.340643</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>21.7</td><td>21.7</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0066988</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.000963</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0044009</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0044</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0002868</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0059093</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	392.1391964	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.3269	--	FE BAG 1 (Bag 1 Fuel Economy)	22.1822887	22.1822887	CH4 BAG 1 (Bag 1 Methane)	0.0061	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0234	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	428.8325615	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0073	--	FE BAG 2 (Bag 2 Fuel Economy)	20.3145444	20.3145444	CH4 BAG 2 (Bag 2 Methane)	0	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	354.3101173	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0238	--	FE BAG 3 (Bag 3 Fuel Economy)	24.5851649	24.5851649	CH4 BAG 3 (Bag 3 Methane)	0.0013	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	METHANE (CH4 - Methane)	0.0016218	--	CO (Carbon Monoxide)	0.0780552	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.479132	--	DT-EER (Drive Trace Energy Economy Rating)	0.9847868	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.340643	--	MFR FE (Manufacturer Fuel Economy)	21.7	21.7	NOX (Nitrogen Oxide)	0.0066988	--	N2O (Nitrous Oxide)	0.000963	--	HC-NM (Non-methane Hydrocarbon)	0.0044009	--	NMOG (Non-methane organic gases)	0.0044	--	PM (Particulate Matter)	0.0002868	--	HC-TOTAL (Total Hydrocarbon)	0.0059093	--		
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Manufacturer Test Comments	Lab Comments: kein Kommentar!; VeCeD: FTP Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3																																																																																						

Manufacturer Test Comments

Lab Comments: kein Kommentar!; VeCeD: FTP Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3

Certification Summary Information Report

Test Group		VVG AJ02.0A2H			Evaporative/Refueling Family					VVG AR0171ADE		
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 30	CREE	401	--	--	--	0.39	--	401	--	--
Fed	120,000 miles	Federal Tier 3 Bin 30	METHANE	0.0016	--	--	--	0.0014	--	0.003	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	N2O	0.001	--	--	--	0.0005	--	0.002	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.08	--	--	--	0.3	--	0.4	1.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	CO-COMP	0.39	--	--	--	--	--	0.4	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0044	--	1.099	--	0.0044	--	0.009	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0111	--	--	--	--	--	0.018	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX-COMP	0.0162	--	--	--	--	--	0.016	0.040	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0067	--	--	--	0.0027	--	0.009	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0003	--	--	--	0.0001	--	0	0.003	Pass
CA	150,000 miles	California LEV-IV SULEV25	CO	0.08	--	--	--	0.3	--	0.4	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG	0.0044	--	1.099	--	0.0044	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.0111	--	--	--	--	--	0.018	0.025	Pass
CA	150,000 miles	California LEV-IV SULEV25	NOX	0.0067	--	--	--	0.0027	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	PM	0.0003	--	--	--	0.0001	--	0	0.001	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	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092284	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/25/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3311	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE																																																																																	
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>465.968818</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>1.0368</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>18.6057199</td><td>18.6057199</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0249</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.2031</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>464.3831314</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0046</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>18.7595856</td><td>18.7595856</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0001</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>381.9998464</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0269</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>22.8029339</td><td>22.8029339</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0016</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0056588</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.2247515</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.7689559</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.0701842</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>0.9774986</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>19.7</td><td>19.7</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.01266</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0012204</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0382272</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0382</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0435613</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	465.968818	--	CO BAG 1 (Bag 1 Carbon Monoxide)	1.0368	--	FE BAG 1 (Bag 1 Fuel Economy)	18.6057199	18.6057199	CH4 BAG 1 (Bag 1 Methane)	0.0249	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.2031	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	464.3831314	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0046	--	FE BAG 2 (Bag 2 Fuel Economy)	18.7595856	18.7595856	CH4 BAG 2 (Bag 2 Methane)	0.0001	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	381.9998464	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0269	--	FE BAG 3 (Bag 3 Fuel Economy)	22.8029339	22.8029339	CH4 BAG 3 (Bag 3 Methane)	0.0016	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0	--	METHANE (CH4 - Methane)	0.0056588	--	CO (Carbon Monoxide)	0.2247515	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.7689559	--	DT-EER (Drive Trace Energy Economy Rating)	-0.0701842	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9774986	--	MFR FE (Manufacturer Fuel Economy)	19.7	19.7	NOX (Nitrogen Oxide)	0.01266	--	N2O (Nitrous Oxide)	0.0012204	--	HC-NM (Non-methane Hydrocarbon)	0.0382272	--	NMOG (Non-methane organic gases)	0.0382	--	HC-TOTAL (Total Hydrocarbon)	0.0435613	--		
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Manufacturer Test Comments	Lab Comments: kein Kommentar!; VeCeD: COLDCO Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3																																																																																			

Certification Summary Information Report

Test Group		VVGAJ02.0A2H				Evaporative/Refueling Family				VVGAR0171ADE		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 30	CO	0.22	--	--	--	0.1	--	0.3	10.0	Pass
Fed	120,000 miles	Federal Tier 3 Bin 30	HC-NM	0.04	--	--	--	0.0032	--	0	0.3	Pass
CA	50,000 miles	California LEV-IV SULEV25	CO	0.22	--	--	--	0.1	--	0.3	10.0	Pass

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092285	Test Procedure	49 - Quick-Driveway (QD)
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	07/30/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3365	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	405.5113966	--
CO BAG 1 (Bag 1 Carbon Monoxide)	0.5708	--
CH4 BAG 1 (Bag 1 Methane)	0.0096	--
NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.008588	--
METHANE (CH4 - Methane)	0.009568	--
CO (Carbon Monoxide)	0.5707954	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.9709169	--
DT-EER (Drive Trace Energy Economy Rating)	0.4875393	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.542342	--
MFR FE (Manufacturer Fuel Economy)	21.4	21.4
NOX (Nitrogen Oxide)	0.008142	--
N2O (Nitrous Oxide)	0.0054411	--
HC-NM (Non-methane Hydrocarbon)	0.0402504	--
NMOG (Non-methane organic gases)	0.008588	--
PM (Particulate Matter)	0	--
HC-TOTAL (Total Hydrocarbon)	0.0496439	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	407	--

Certification Summary Information Report

Test Group		VVG AJ02.0A2H			Evaporative/Refueling Family				VVG AR0171ADE			
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		405.5113966			--					
Manufacturer Test Comments		Lab Comments: kein Kommentar!; VeCeD: Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0086	--	1.099	--	0.0044	--	0.013	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0167	--	--	--	--	--	0.024	0.042	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0081	--	--	--	0.0027	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG	0.0086	--	1.099	--	0.0044	--	0.013	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.0167	--	--	--	--	--	0.024	0.037	Pass
CA	150,000 miles	California LEV-IV SULEV25	NOX	0.0081	--	--	--	0.0027	--	0.011	99.999	Pass

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092286	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	08/19/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3698	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE																																																																														
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>411.2865276</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.5197</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>21.1297402</td><td>21.1297402</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.0138</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0561</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>439.8568898</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.0003</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>19.8058944</td><td>19.8058944</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0</td><td>--</td></tr><tr><td>CO2 BAG 3 (Bag 3 Carbon Dioxide)</td><td>364.0722371</td><td>--</td></tr><tr><td>CO BAG 3 (Bag 3 Carbon Monoxide)</td><td>0.0156</td><td>--</td></tr><tr><td>FE BAG 3 (Bag 3 Fuel Economy)</td><td>23.9267157</td><td>23.9267157</td></tr><tr><td>CH4 BAG 3 (Bag 3 Methane)</td><td>0.0017</td><td>--</td></tr><tr><td>NMOG BAG 3 (Bag 3 Non-methane organic gases)</td><td>0.0001</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.0033473</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.1120827</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>1.423362</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>0.6978477</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>2.509813</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>21.1</td><td>21.1</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0089414</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.0105779</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0106</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0138482</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	411.2865276	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.5197	--	FE BAG 1 (Bag 1 Fuel Economy)	21.1297402	21.1297402	CH4 BAG 1 (Bag 1 Methane)	0.0138	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0561	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	439.8568898	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.0003	--	FE BAG 2 (Bag 2 Fuel Economy)	19.8058944	19.8058944	CH4 BAG 2 (Bag 2 Methane)	0	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0	--	CO2 BAG 3 (Bag 3 Carbon Dioxide)	364.0722371	--	CO BAG 3 (Bag 3 Carbon Monoxide)	0.0156	--	FE BAG 3 (Bag 3 Fuel Economy)	23.9267157	23.9267157	CH4 BAG 3 (Bag 3 Methane)	0.0017	--	NMOG BAG 3 (Bag 3 Non-methane organic gases)	0.0001	--	METHANE (CH4 - Methane)	0.0033473	--	CO (Carbon Monoxide)	0.1120827	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.423362	--	DT-EER (Drive Trace Energy Economy Rating)	0.6978477	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.509813	--	MFR FE (Manufacturer Fuel Economy)	21.1	21.1	NOX (Nitrogen Oxide)	0.0089414	--	HC-NM (Non-methane Hydrocarbon)	0.0105779	--	NMOG (Non-methane organic gases)	0.0106	--	HC-TOTAL (Total Hydrocarbon)	0.0138482	--		
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		<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CREE/OPT-CREE</th></tr><tr><td>Carbon-Related Exhaust Emissions</td><td>413</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE	Carbon-Related Exhaust Emissions	413	--																																																																									
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		<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CO2</th></tr><tr><td>Carbon dioxide</td><td>413.1263297</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	413.1263297	--																																																																									
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Carbon dioxide	413.1263297	--																																																																															
Manufacturer Test Comments	Lab Comments: kein Kommentar!; VeCeD: 50FTP Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3																																																																																

Certification Summary Information Report

Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family					VVGAR0171ADE		
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 SULEV25	CO	0.11	--	--	--	--	--	0.1	1.0	Pass
CA	4,000 miles	California LEV-IV SULEV25	NMOG	0.0106	--	1.099	--	--	--	0.011	99.999	Pass
CA	4,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.01954	--	--	--	--	--	0.02	0.050	Pass
CA	4,000 miles	California LEV-IV SULEV25	NOX	0.00894	--	--	--	--	--	0.0089	99.9990	Pass

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092270	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	07/30/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3368	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0001052	--
CO (Carbon Monoxide)	0.0278904	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.105093	--
DT-EER (Drive Trace Energy Economy Rating)	0.6291797	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	2.568537	--
MFR FE (Manufacturer Fuel Economy)	34.6	34.6
NOX (Nitrogen Oxide)	0.0013949	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0001512	--
NMOG (Non-methane organic gases)	0.0002	--
HC-TOTAL (Total Hydrocarbon)	0.0002545	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	252	252

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	252.2168745	--

Manufacturer Test Comments

Lab Comments: kein Kommentar!; VeCeD: HWY Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3

Certification Summary Information Report

Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family					VVGAR0171ADE		
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 30	CREE	252	--	--	--	0.39	--	252	--	--
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0002	--	1.03	--	0.0044	--	0.005	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG+NOX	0.0016	--	--	--	--	--	0.009	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0014	--	--	--	0.0027	--	0.004	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG	0.0002	--	1.03	--	0.0044	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.0016	--	--	--	--	--	0.009	0.025	Pass
CA	150,000 miles	California LEV-IV SULEV25	NOX	0.0014	--	--	--	0.0027	--	0.004	99.999	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	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092283	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	07/15/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3182	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE																																																																					
	<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated FE Equivalent Value (miles per gallon)</th></tr><tr><td>CO2 BAG 1 (Bag 1 Carbon Dioxide)</td><td>576.6746262</td><td>--</td></tr><tr><td>CO BAG 1 (Bag 1 Carbon Monoxide)</td><td>0.0167</td><td>--</td></tr><tr><td>FE BAG 1 (Bag 1 Fuel Economy)</td><td>15.1060341</td><td>15.1060341</td></tr><tr><td>CH4 BAG 1 (Bag 1 Methane)</td><td>0.001</td><td>--</td></tr><tr><td>NMOG BAG 1 (Bag 1 Non-methane organic gases)</td><td>0.0014</td><td>--</td></tr><tr><td>CO2 BAG 2 (Bag 2 Carbon Dioxide)</td><td>318.9085726</td><td>--</td></tr><tr><td>CO BAG 2 (Bag 2 Carbon Monoxide)</td><td>0.1451</td><td>--</td></tr><tr><td>FE BAG 2 (Bag 2 Fuel Economy)</td><td>27.2973611</td><td>27.2973611</td></tr><tr><td>CH4 BAG 2 (Bag 2 Methane)</td><td>0.0012</td><td>--</td></tr><tr><td>NMOG BAG 2 (Bag 2 Non-methane organic gases)</td><td>0.001</td><td>--</td></tr><tr><td>METHANE (CH4 - Methane)</td><td>0.001162</td><td>--</td></tr><tr><td>CO (Carbon Monoxide)</td><td>0.1166986</td><td>--</td></tr><tr><td>DT-ASCR (Drive Trace Absolute Speed Change Rating)</td><td>0.2666909</td><td>--</td></tr><tr><td>DT-EER (Drive Trace Energy Economy Rating)</td><td>-0.3341222</td><td>--</td></tr><tr><td>DT-IWRR (Drive Trace Inertia Work Ratio Rating)</td><td>1.086662</td><td>--</td></tr><tr><td>MFR FE (Manufacturer Fuel Economy)</td><td>23.2</td><td>23.2</td></tr><tr><td>NOX (Nitrogen Oxide)</td><td>0.0062737</td><td>--</td></tr><tr><td>N2O (Nitrous Oxide)</td><td>0.0000188</td><td>--</td></tr><tr><td>HC-NM (Non-methane Hydrocarbon)</td><td>0.001074</td><td>--</td></tr><tr><td>NMOG (Non-methane organic gases)</td><td>0.0011</td><td>--</td></tr><tr><td>PM (Particulate Matter)</td><td>0.0002354</td><td>--</td></tr><tr><td>HC-TOTAL (Total Hydrocarbon)</td><td>0.0021986</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)	CO2 BAG 1 (Bag 1 Carbon Dioxide)	576.6746262	--	CO BAG 1 (Bag 1 Carbon Monoxide)	0.0167	--	FE BAG 1 (Bag 1 Fuel Economy)	15.1060341	15.1060341	CH4 BAG 1 (Bag 1 Methane)	0.001	--	NMOG BAG 1 (Bag 1 Non-methane organic gases)	0.0014	--	CO2 BAG 2 (Bag 2 Carbon Dioxide)	318.9085726	--	CO BAG 2 (Bag 2 Carbon Monoxide)	0.1451	--	FE BAG 2 (Bag 2 Fuel Economy)	27.2973611	27.2973611	CH4 BAG 2 (Bag 2 Methane)	0.0012	--	NMOG BAG 2 (Bag 2 Non-methane organic gases)	0.001	--	METHANE (CH4 - Methane)	0.001162	--	CO (Carbon Monoxide)	0.1166986	--	DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2666909	--	DT-EER (Drive Trace Energy Economy Rating)	-0.3341222	--	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.086662	--	MFR FE (Manufacturer Fuel Economy)	23.2	23.2	NOX (Nitrogen Oxide)	0.0062737	--	N2O (Nitrous Oxide)	0.0000188	--	HC-NM (Non-methane Hydrocarbon)	0.001074	--	NMOG (Non-methane organic gases)	0.0011	--	PM (Particulate Matter)	0.0002354	--	HC-TOTAL (Total Hydrocarbon)	0.0021986	--		
	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)																																																																					
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		<table><tr><th>Test Result Name</th><th>Unrounded Test Result</th><th>Verify Calculated CO2</th></tr><tr><td>Carbon dioxide</td><td>375.9892684</td><td>--</td></tr></table>	Test Result Name	Unrounded Test Result	Verify Calculated CO2	Carbon dioxide	375.9892684	--																																																																
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Manufacturer Test Comments	Lab Comments: kein Kommentar!; VeCeD: US06 Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3																																																																							

Certification Summary Information Report

Test Group		VVG AJ02.0A2H			Evaporative/Refueling Family					VVG AR0171ADE		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.1167	--	--	--	0.3	--	0.417	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0011	--	1.03	--	0.0044	--	0.006	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0063	--	--	--	0.0027	--	0.009	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	PM	0.0002	--	--	--	0.0001	--	0	0.006	Pass
CA	150,000 miles	California LEV-IV SULEV25	CO	0.12	--	--	--	0.3	--	0.4	9.6	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG	0.0011	--	1.03	--	0.0044	--	0.006	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.0074	--	--	--	--	--	0.014	0.030	Pass
CA	150,000 miles	California LEV-IV SULEV25	NOX	0.0063	--	--	--	0.0027	--	0.009	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	PM	0.0002	--	--	--	0.0001	--	0	0.003	Pass

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Test #	TVGA10092269	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	07/28/2025	Fuel	Gasoline
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Vehicle Class	LDV/Passenger Car	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	3350	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0021113	--
CO (Carbon Monoxide)	0.0766967	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.113407	--
DT-EER (Drive Trace Energy Economy Rating)	0.3992158	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.69804	--
MFR FE (Manufacturer Fuel Economy)	20.2	20.2
NOX (Nitrogen Oxide)	0.0078867	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0005321	--
NMOG (Non-methane organic gases)	0.0005	--
PM (Particulate Matter)	0.0002716	--
HC-TOTAL (Total Hydrocarbon)	0.0025725	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	432	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	432.2274727	--

Manufacturer Test Comments

Lab Comments: kein Kommentar!; VeCeD: SC03 Tested as Q5 TFSI quattro EDV ETW: 4750 RLHP: 15.3

Certification Summary Information Report

Test Group		VVG AJ02.0A2H				Evaporative/Refueling Family				VVG AR0171ADE		
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Bin 30	CO	0.0767	--	--	--	0.3	--	0.377	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NMOG	0.0005	--	1.03	--	0.0044	--	0.005	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 30	NOX	0.0079	--	--	--	0.0027	--	0.011	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	CO	0.08	--	--	--	0.3	--	0.4	1.0	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG	0.0005	--	1.03	--	0.0044	--	0.005	99.999	Pass
CA	150,000 miles	California LEV-IV SULEV25	NMOG+NOX	0.0084	--	--	--	--	--	0.016	0.025	Pass
CA	150,000 miles	California LEV-IV SULEV25	NOX	0.0079	--	--	--	0.0027	--	0.011	99.999	Pass

Certification Summary Information Report

Test Group	VVGAJ02.0A2H	Evaporative/Refueling Family	VVGAR0171ADE
Fuel Properties			
Fuel Batch ID	IG0045	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/05/2024
Fuel Batch Calibration Effective Date	09/19/2024	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)	17960
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.829	Weight Fraction CO2	--
Fuel Batch ID	IG0045	Fuel Calibration Number	9
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	07/05/2024
Fuel Batch Calibration Effective Date	09/19/2024	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	WB0027	Fuel Calibration Number	1
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	05/03/2024
Fuel Batch Calibration Effective Date	06/12/2024	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	0.752
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17969
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.833	Weight Fraction CO2	--

Certification Summary Information Report

Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family			VVGAR0171ADE		
Consolidated List of Standards										
Exhaust Standards										
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV SULEV25		
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	
4,000 miles	CO	--	--	--	--	--	--	--	1.0	
4,000 miles	NMOG	--	--	1.099	--	--	--	--	99.999	
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.050	
4,000 miles	NOX	--	--	--	--	--	--	--	99.9990	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV SULEV25		
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	--	--	--	--	--	--	0.3	9.6	
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030	
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.003	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV SULEV25		
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	--	--	--	--	--	--	0.1	10.0	

Certification Summary Information Report

Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family			VVGAR0171ADE	
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Federal fuel 2-day exhaust (w/can load)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0.39	999
120,000 miles	METHANE	--	--	--	--	--	--	0.0014	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0005	0.010
150,000 miles	CO	--	--	--	--	--	--	0.3	1.0
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	1.099	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.040
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.003
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV SULEV25	
Fuel		Gasoline			Test Procedure			HWFE	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.025
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			US06	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.3	99.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.006

Certification Summary Information Report

Test Group		VVGAJ02.0A2H			Evaporative/Refueling Family		VVGAR0171ADE		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Both		
Vehicle Class		LDV/Passenger Car			Standard Level		California LEV-IV SULEV25		
Fuel		Gasoline			Test Procedure		Quick-Driveway (QD)		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.099	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.037
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999
Cert Region		California + CAA Section 177 states			Cert/In-Use Code		Both		
Vehicle Class		LDV/Passenger Car			Standard Level		California LEV-IV SULEV25		
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	--	--	--	--	--	--	0.3	1.0
150,000 miles	NMOG	--	--	1.099	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.025
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0001	0.001
Cert Region		Federal			Cert/In-Use Code		Both		
Vehicle Class		LDV/Passenger Car			Standard Level		Federal Tier 3 Bin 30		
Fuel		Gasoline			Test Procedure		HWFE		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
120,000 miles	CREE	--	--	--	--	--	--	0.39	999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.030
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999

Certification Summary Information Report

Test Group		VVG AJ02.0A2H			Evaporative/Refueling Family			VVGAR0171ADE	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			California LEV-IV SULEV25	
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	--	--	--	--	--	--	0.3	1.0
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.025
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999

Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 30	
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	--	--	--	--	--	--	0.3	99.999
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0044	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999

Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Quick-Driveway (QD)	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	NMOG	--	--	1.099	--	--	--	0.0044	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.042
150,000 miles	NOX	--	--	--	--	--	--	0.0027	99.999

Certification Summary Information Report

Test Group		VVG AJ02.0A2H			Evaporative/Refueling Family			VVGAR0171ADE	
Cert Region		Federal			Cert/In-Use Code			Both	
Vehicle Class		LDV/Passenger Car			Standard Level			Federal Tier 3 Bin 30	
Fuel		Gasoline			Test Procedure			Cold CO	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
50,000 miles	CO	--	--	--	--	--	--	0.1	10.0
120,000 miles	HC-NM	--	--	--	--	--	--	0.0032	0.3

Evaporative/Refueling Standards

Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		2-day evap					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--		0.425	0	

Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		California + CAA Section 177 states					
Cert/In-Use Code		Both		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		--		0.425		0	

Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Evap Canister Bleed Test					
Fuel	Useful Life	Emission Name		Rounded Result		Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV		--		0.020	--

Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel refueling test (ORVR)					
Fuel	Useful Life	Emission Name	Rounded Result		Std	Add DF	
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--		0.20	0	

Certification Summary Information Report

Test Group		VVGAJ02.0A2H		Evaporative/Refueling Family		VVGAR0171ADE	
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal Fuel Running Loss					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0		
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		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	--	0.01	0		
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		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		
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		Federal	
Cert/In-Use Code		Both		Standard Level		Federal Tier 3 Evap	
Test Procedure		Federal fuel 3-day evap					
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF		
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.425	0		
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		California + CAA Section 177 states	
Cert/In-Use Code		Both		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	--	0.425	0		

Certification Summary Information Report

Test Group		VVGAJ02.0A2H		Evaporative/Refueling Family		VVGAR0171ADE					
Evaporative/Refueling Family		VVGAR0171ADE		Cert Region		California + CAA Section 177 states					
Cert/In-Use Code		Both		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		--	

Certification Summary Information Report

Test Group		VVG AJ02.0A2H	Evaporative/Refueling Family	VVG AR0171ADE
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		VVGAJ02.0A2H	Evaporative/Refueling Family		VVGAR0171ADE
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		VVGAJ02.0A2H	Evaporative/Refueling Family		VVGAR0171ADE
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		VVGAJ02.0A2H	Evaporative/Refueling Family		VVGAR0171ADE
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	