

Kim, Seong Hun

From: noreply@salesforce.com on behalf of California Air <mcertfees@arb.ca.gov>
Sent: Friday, February 27, 2026 10:38 AM
To: Kim, Seong Hun
Subject: [From: External] MS Fee Payment Confirmation for Invoice MSF250788
Attachments: MSF250788 - signed.pdf

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Dear Seong Hun Kim

Attached is documentation for your MS Fee payment for Invoice Name MSF250788. Please include a copy of this invoice and email with each application that is listed when submitting your application to the applicable MS Fee program.

1. Payment ID – 25RA0309
2. Date of Payment – 2/26/2026
3. Payment Status - Paid



MOBILE SOURCE CERTIFICATION AND COMPLIANCE FEE PAYMENT FORM FOR ON-ROAD APPLICATIONS ONLY

CARB USE ONLY

Invoice Name	MSF250788
Invoice Date	Feb 06, 2026

COMPANY INFORMATION

Company Name	Volkswagen Group of America, Inc.
Address	3800 Hamlin Road
City	Auburn Hills
State	MI
Zip	48326
Country	United States
Contact Name	Seong Hun Kim
Contact Telephone Number	2489314347
Contact Email	sunny.kim@vw.com
CARB Customer Number	CCAM000085

APPLICATION INFORMATION

Payment Row Number	Product Description or File Name	Model Year/Calendar Year	Unique Application Identifier: Test Group, Engine Family, Trailer Family, Vehicle Family, ZEP Family, if applicable (ID listed in payment row must match the unique identifier given to the certification application)	Category Type	Fee Type	Amount
1	Audi_RSQ8,S8	Model Year 2027	VVGAJ04.0NAT	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
2	Audi_A8	Model Year 2027	VVGAV03.0N7M	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	\$ 25,155.00
3	Audi_SQ8	Model Year 2027	VVGAT04.0NAV	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	\$ 25,155.00
4	Audi_Q8	Model Year 2027	VVGAT03.0N7N	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	\$ 25,155.00
5	Audi_Q4 eton quattro	Model Year 2027	VVGAV00.0A4A	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,577.00
6	Audi_Q4 eton	Model Year 2027	VVGAV00.0A4R	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,577.00
7	Audi_etron GT	Model Year 2027	VVGAV00.0NZG	Light-duty vehicle test group and medium-duty vehicle test group	Zero-Emission	\$ 12,577.00

Total Due	\$ 163,505.00
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I, Tony D'Ambrosi
Tony D'Ambrosi (Feb 6, 2026 15:39:10 EST)

(Responsible Party Signature Here)

_, attest that any information provided is true, accurate, and complete.

VOLKSWAGEN

GROUP OF AMERICA

Ms. Robin U. Lang, Chief
Emissions Certification and Compliance Division
California Air Resources Board
4001 Iowa Avenue
Riverside, California 92507

Anthony D'Ambrosi Name
Dir, OBD & Certification Title
EEO - Certification Department
(248) 754-4396 Phone
Tony.DAmbrosi@vw.com E-Mail

April 13, 2026 Date

Subject: 2027 Model Year Partial Carryover Application Request

Dear Ms. Lang,

VOLKSWAGEN GROUP OF AMERICA, INC.
3800 HAMLIN ROAD
AUBURN HILLS, MI 48326

VWGoA is requesting the Air Resources Board approve the following Partial Carryover Application for VVGAT04.0NAV / VVGAR0182NCM / VVGAR0155ECR based on Partial Carryover data from TVGAT04.0NAV / TVGAR0182NCM and TVGAT04.0PAA / TVGAR0155ECR and Executive Order numbers A-413-0375 / A-413-0390-1. By signing this letter, VWGoA is certifying that this model year's application package:

1. Includes no change of the emission standards/FELs, regulation requirements, emission characteristics of the engine, or test procedures requirements.
2. The 2027 application package differs from the 2026 application package only by: (please check applicable changes)
 - Model year
 - Test Group/Engine/Vehicle/Evaporative family name (typically the first character)
 - Manufacturer contact information
 - Projected sales data
 - Model information (may only add models if the certification emission levels are not changed)
 - Part numbers (durable to full useful life and no impact on certification emission levels)
 - Equipment types (i.e. crane, dozer, generator, etc.)
3. All other information in the 2027 application package is identical to the 2026 application package (incorporates all approved running changes to date).
4. The application package is complete and named correctly using the appropriate Document Management System (DMS) file and workflow naming conventions and submitted using the correct workflow process.

If you have any questions regarding this request, please contact Greg Allen at (248) 754-4209 or by email at Gregory.Allen@vw.com.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C

Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2026.04.13 08:41:56 -0400'

Anthony D'Ambrosi
Volkswagen Group of America, Inc.
Engineering and Environmental Office

Enclosure(s)



Audi AG and Bentley Motors Limited (Members of the Volkswagen Group)

Application for Emissions Certification 2027 Model Year

Test Group: VVGAT04.0NAV
Durability Group: VVGAGPGNNNAV
Evap. Families: VVGAR0182NCM
VVGAR0155ECR

Certificate Number: VVGAT04.0NAV-XXX

Durability Group Description: Four Stroke, Otto Cycle, Gasoline Fueled, Direct Fuel Injection

Catalyst Code: JM842 (PRE), JM842 (MAIN)

Test Group Description: 4.0l V8 TFSI Bi-Turbo - LDT4 DFI/2TC/2CAC/2TWC/2WR-HO2S/2HO2S

Applicable Exhaust Standards: (50 State) Federal: Tier 4 Interim-Bin 125
California: LEV IV ULEV 125

Applicable Evaporative Standards: (50 State) Federal: Tier 4 FEL: 450 mg
California: LEV IV FEL: 450 mg

Carlines Covered: SQ8, Bentayga, Bentayga EWB

Vehicles Tested:

VID	Config	Test Type / #		Test Type / #	
RNAV-SQ8	0	FTP /	RVGA10082203	HFET /	RVGA10082204
		US06 /	RVGA10082205	SC03 /	RVGA10082206
		20°F FTP /	RVGA10082212	50°F FTP /	RVGA10082211
RA77-Q7-452	0	ORVR /	RVGA10080552	2-Day /	RVGA10080553
		3-Day /	RVGA10080554	Running Loss /	RVGA10080555
EC-9YA-19		BETP /	KPRX10054425		
EC-9YA-19	0	BETP /	KPRX10054425	2-Day /	KPRX91004097
		ORVR /	KPRX10054428	3-Day /	KPRX10054422
				Running Loss /	KPRX10054427

Issue Date: 04/08/2026

Questions, Contact:

EEO Office, Auburn Hills, Michigan

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1. Correspondence and Communication

Please refer to the Common Section

2. Durability Group Description

Durability Source Basics	
Durability Procedure	VW / Audi ADP
Durability Group Name	VVGAGPGNNNAV
Source of Durability Data	PNAT-DDV
Relation Factor BAT VWADP / BAT SRC	2.22
Engine Type	Piston
Combustion Method	Otto cycle, four stroke
Fuel Used	Gasoline
Basic Fuel Metering System	Direct Injection
Displacement [l]	4.0

Catalyst / After treatment device specifics		
	Durability Group Statistics	Durability Data Vehicle
Catalyst Construction		Monolith
Precious Metal Composition TWC		Palladium, Rhodium
PTOX TWC		n.a.
NAC:1 SCRC: 2		n.a.
Total Catalyst Volume [l]		5.92
Total Precious Metal Loading [g]		20.93
Precious Metal Load Rate PM [g] / CV [l]		3.54
Cat. Grouping Statistic	5.2	5.2
Durability Group Limit (25% or 0.2 g/l)	3.9	3.9
Test Group Covered		VVGAT04.0NAV VVGAJ04.0NAT

3. Evaporative / Refueling Family Description

				C/O - BETP
Evaporative / Refueling Family Name		VVGAR0182NCM	VVGAR0155ECR	BETP C/O EC-9YA-19 KVGAR0150NCM
Vapor storage device	Canister	Yes	Yes	Yes
	Other	-		-
Basic canister design	Working Capacity (g)	176	155	150
	Bed Volume (cm ³)	2660	2800	2790
	Number, config.	1	1	1
	Geometry	Other	Rectangular	Other
	Construction	5-Chamber	5-Chamber	5-Chamber
	Bleeding trap	Yes	Yes	Yes
	Bleed trap Working Capacity (g)	6-10	6-10	6-10
	Material	Plastic	Plastic	Plastic
Fuel System		DFI	DFI	DFI
Type of refueling system	Integrated	Yes	Yes	Yes
	Non-integrated	-	-	-
	Other	-	-	-
Fill pipe seal mechanism	Liquid seal	Yes	Yes	Yes
	Mechanical Seal	-	-	-
	Other	-	-	-
Method of controlling vapor flow to the engine	Vacuum	-	-	-
	Purge valve	Yes	Yes	Yes
	Other	-	-	-
Purge control system	Valve type	Duty-Cycle	Duty Cycle	Duty-Cycle
	Control	ECM	ECM	ECM
Vapor hose material	4 / multi-layer hose	Yes	Yes	Yes
	Stainless Steel	-	-	-
	Alloy	-	-	-
Fuel tank material	Metal	-	-	-
	Plastic	Yes	Yes	Yes
	Other	-	-	-
Test groups combined with this Evap. family		VVGAT03.0N7N VVGAJ04.0NAT VVGAT04.0NAV	VVGAT04.0NAV	

4.0 Durability Procedure Description

Please refer to the Common Section

5.0 Test Group Description

Evap. Family:	VVGAR0182NCM VVGAR0155ECR
Test Group Name:	VVGAT04.0NAV
Certificate Number:	VVGAT04.0NAV-XXX
Engine displacements covered:	4.0 liters
Arrangement and number of cylinders:	V8
Vehicle class(es) covered:	LDT4
Federal Emissions Standards Class:	Tier 4 Interim BIN 125
California Emissions Standards Class:	LEV IV ULEV125

5.1 Test Group Emission Standards

Please refer to Certification Summary Information Report included in Section 7 for applicable emission standards.

6. Test Vehicle Description

Certificate Number: VVGAT04.0NAV-XXX
Models: SQ8
Test Group: VVGAT04.0NAV
Evaporative/Refueling Family: VVGAR0182NCM

VID	Config.	Vehicle Type	Tests Performed
RNAV-SQ8	0	EDV	FTP, HWY, US06, SC03, Cold FTP, 50deg FTP
RNAV-SQ8	0	EDV E0	FTP, HWY, US06, SC03
RA77-Q7-452	0	EVAP	3Day Evap, 2Day Evap, Running Loss, ORVR
EC-9YA-19	0	EVAP	BETP
TNAV-SQ8	0	FEDV	FTP, HWY, US06, SC03, Cold FTP
SNAV-SQ8	0	FEDV Canada	FTP, HWY

Certificate Number: VVGAT04.0NAV-XXX
Models: Bentayga, Bentayga EWB
Test Group: VVGAT04.0NAV
Evaporative/Refueling Family: VVGAR0155ECR

VID	Config.	Vehicle Type	Tests Performed
BY 6360 4 - 0275	1	FEDV	FTP, HWY, US06, SC03, Cold FTP, 50deg FTP
EC-9YA-19	0	EVAP	3-Day Evap, 2-Day Evap, Running Loss, ORVR, BETP

7. Test Results

Please refer to the Certification Summary Information Report.

Certification Summary Information Report

Manufacturer	Volkswagen Group of America, Inc.	Manufacturer Code	VGA
Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	04/21/2026 09:40:29 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 fuel injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	No
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	No
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VVGAGPGNNNAV	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	05/18/2026	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
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	VVGAJ04.0NAT
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	3
OBD Deficiencies Comments	2027 MY system design with 2 deficiencies for SAE J1979-2 implementation and PID \$54 evaporative system pressure sensor scan tool output and 1 deficiency for SAE J1979-2 implementation for test group VVGAV03.0N7M, VVGAJ03.0N7N, VVGAJ04.0NAT, and VVGAT04.0NAV		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	04/06/2026 11:03:50 AM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	Plastic				
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)	182	Number of Primary Canisters	1				
Number of Bleed Canisters	1	Bleed Canister Total Working Capacity (grams)	10				
Mfr Evaporative/Refueling Family Comments	Integrated Bleed Canister FEL 450mg						
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				
VVGAR0182NCM-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	381 - SQ8	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Volkswagen Group of America, Inc.	2 - Audi	381 - SQ8	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W40 VW50200 / VW50500				
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM	
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)	4.0	Engine Rated Horsepower	500	
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2	
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2	
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air	
Air Aspiration Drive Method(s)	Mechanical			
Cylinder Deactivation	Yes			
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.			
Variable Valve Timing	Yes			
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.			
Variable Valve Lift?	No			
Variable Valve Lift System Description	--			
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4	
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--	
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--	
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--	
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--	
Mfr Air/Fuel Sensor Comments	--			
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No	
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--	
Closed Loop Air Injection System	No	Air Injection Type if 'Other'	--	
Air Injection Type	Not Applicable			
Mfr Engine Configuration Comments	Applies to DWRB var: 0			

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Engine Configuration Number 2			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	641
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	DWNG		

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Engine Configuration Number 3			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	542
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	DWRA		

Official Test Numbers

Test Group	Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City	EPA City	EPA Highway	EPA Highway	CREE Weighting Factor
							Litmus Value	Litmus Threshold	Litmus Value	Litmus Threshold	
Gasoline	RVGA10082203	RVGA10082205	RVGA10082206	RVGA10082212	RVGA10082204	12.2	228.2	23.7	286.1	--	

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM						
Emission Data Vehicle Information									
Vehicle ID / Configuration	EC-9YA-19 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	KPRXT03.0CV6	Original Evaporative/Refueling Family	KPRXR0150RED						
Original Test Vehicle Model Year	2019								
Vehicle Model									
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </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	0.9982						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	DCB	Rated Horsepower	332						
Displacement (liters)	3								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single						
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4696	Equivalent Test Weight (pounds)	5000						
GVWR (lbs)	6239	N/V Ratio	48.8						
Axle Ratio	3.21								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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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	49.458	0.71636	0.01991	49.458	0.71636	0.01991	18
Cold CO	49.458	0.71636	0.01991	49.458	0.71636	0.01991	N/A
US06	49.458	0.71636	0.01991	49.458	0.71636	0.01991	N/A

Emission Control Device Comments --
Manufacturer Test Vehicle Comments Evap test vehicle for base Cayenne, Cayenne S, and Cayenne Turbo

Test #	KPRX10054425	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	05/26/2018	Fuel	N/A
Fuel Batch ID	CAFW17	Fuel Calibration Number	745
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	VW: VGA/7		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4303	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.009	--

Manufacturer Test Comments new "E3" (all non-hybrid Cayenne models); E10 fuel; Porsche test number E48-255-18 (VW Wolfsburg)

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM						
Emission Data Vehicle Information									
Vehicle ID / Configuration	RA77-Q7-452 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	RVGAT02.0A77	Original Evaporative/Refueling Family	RVGAR0182NCM						
Original Test Vehicle Model Year	2024								
Vehicle Model									
Represented Test Vehicle Make	Audi	Represented Test Vehicle Model	Q7						
Leak Family Details									
Leak Family Identifier	001	Leak Family Name	RVGAR0182NCM-001						
Drive Sources and Fuel System Details									
<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </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	1.194						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Kilometers								
Engine Code	DUVA	Rated Horsepower	261						
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	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5049	Equivalent Test Weight (pounds)	5250						
GVWR (lbs)	6393	N/V Ratio	25						
Axle Ratio	3.5								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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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	61.37	0.1473	0.02847	3.42	-0.0376	0.02777	18.7
Cold CO	67.51	0.162	0.03132	-7.72	-0.1046	0.03054	N/A
US06	61.37	0.1473	0.02847	3.42	-0.0376	0.02777	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments MY2024 Audi Q7 2.0L tested with E10 fuel for Exhaust EDV (and Evap) and also E0 fuel for FEDV.

Test #	RVGA10080553	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	RVGA10080546	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	02/14/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	3
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	5446	Odometer Units	K
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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.311	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.3110	0.011	0.322	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.3110	0.0110	0.322	0.450	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Test #	RVGA10080554	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	RVGA10080549	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	03/31/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	5
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	6048	Odometer Units	K
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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.207	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.2070	0.014	0.221	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2070	0.0140	0.221	0.450	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Test #	RVGA10080552	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	RVGA10080538	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	01/24/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	2
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	5131	Odometer Units	K
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
HC (Hydrocarbon for Running Loss and ORVR)	0.009	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.009	0.007	0.02	0.20	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.009	0.007	0.02	0.20	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10080555	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	RVGA10080549	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	03/31/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	5
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	6020	Odometer Units	K
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
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

Manufacturer Test Comments --

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.0000	0.000	0.000	0.050	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0000	0.000	0.000	0.050	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM						
Emission Data Vehicle Information									
Vehicle ID / Configuration	RNAV-SQ8 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	RVGAT04.0NAV	Original Evaporative/Refueling Family	RVGAR0182NCM						
Original Test Vehicle Model Year	2024								
Vehicle Model									
Represented Test Vehicle Make	Audi	Represented Test Vehicle Model	SQ8						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </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	0.9878						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Kilometers								
Engine Code	DWRB	Rated Horsepower	500						
Displacement (liters)	4								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5534	Equivalent Test Weight (pounds)	6000						
GVWR (lbs)	6581	N/V Ratio	23.2						
Axle Ratio	3.2								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0182NCM
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	68.69	0.1946	0.02976	10.89	0.0688	0.02783	20.4	
Cold CO	75.57	0.2141	0.03274	6.7	-0.0016	0.03101	N/A	
US06	68.69	0.1946	0.02976	10.89	0.0688	0.02783	N/A	
Emission Control Device Comments	--							
Manufacturer Test Vehicle Comments	Tested in S-Mode							

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082203	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4883	Odometer Units	K
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)	660.4015524	--
FE BAG 1 (Bag 1 Fuel Economy)	13.1547526	13.1547526
CO2 BAG 2 (Bag 2 Carbon Dioxide)	786.7064101	--
FE BAG 2 (Bag 2 Fuel Economy)	11.0605716	11.0605716
CO2 BAG 3 (Bag 3 Carbon Dioxide)	604.6102631	--
FE BAG 3 (Bag 3 Fuel Economy)	14.386089	14.386089
METHANE (CH4 - Methane)	0.0026609	--
CO (Carbon Monoxide)	0.1842126	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.454654	--
DT-EER (Drive Trace Energy Economy Rating)	0.6096428	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.888181	--
MFR FE (Manufacturer Fuel Economy)	12.2	12.2
NOX (Nitrogen Oxide)	0.0286465	--
N2O (Nitrous Oxide)	0.0005749	--
HC-NM (Non-methane Hydrocarbon)	0.0154574	--
NMOG (Non-methane organic gases)	0.017	--
PM (Particulate Matter)	0.0013648	--
HC-TOTAL (Total Hydrocarbon)	0.0177436	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	711	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	711	--

Manufacturer Test Comments 4k FED. FUEL FTP - Tested as AUDI dr. - ETW: 6000

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	--	--	--	0.4300	--	999	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0027	--	--	--	0.0018	--	0.004	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0006	--	--	--	0.0005	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO-COMP	0.57	--	--	--	--	--	0.6	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0170	--	1.0998	--	0.0088	--	0.026	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0456	--	--	--	--	--	0.056	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX-COMP	0.0442	--	--	--	--	--	0.044	0.110	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0286	--	--	--	0.0012	--	0.030	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0170	--	1.0998	--	0.0088	--	0.026	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04565	--	--	--	--	--	0.056	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02865	--	--	--	0.0012	--	0.0298	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082207	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	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5029	Odometer Units	K
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)	654.9260814	--
FE BAG 1 (Bag 1 Fuel Economy)	13.4866424	13.4866424
CO2 BAG 2 (Bag 2 Carbon Dioxide)	784.3696426	--
FE BAG 2 (Bag 2 Fuel Economy)	11.2877753	11.2877753
CO2 BAG 3 (Bag 3 Carbon Dioxide)	599.7490786	--
FE BAG 3 (Bag 3 Fuel Economy)	14.7560699	14.7560699
METHANE (CH4 - Methane)	0.0030533	--
CO (Carbon Monoxide)	0.2452017	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.221136	--
DT-EER (Drive Trace Energy Economy Rating)	1.29503	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.502212	--
MFR FE (Manufacturer Fuel Economy)	12.5	12.5
NOX (Nitrogen Oxide)	0.0260963	--
N2O (Nitrous Oxide)	0.0004191	--
HC-NM (Non-methane Hydrocarbon)	0.0171843	--
NMOG (Non-methane organic gases)	0.0177	--
PM (Particulate Matter)	0.0013588	--
HC-TOTAL (Total Hydrocarbon)	0.0201256	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	707	707

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	707	--

Manufacturer Test Comments 4k FED. FUEL FTP - Tested as AUDI dr. - ETW: 6000

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	707	--	--	--	0.4300	--	707	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0031	--	--	--	0.0018	--	0.005	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0004	--	--	--	0.0005	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.25	--	--	--	0.3300	--	0.6	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0177	--	1.0998	--	0.0088	--	0.026	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0438	--	--	--	--	--	0.054	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0261	--	--	--	0.0012	--	0.027	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.25	--	--	--	0.3300	--	0.6	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0177	--	1.0998	--	0.0088	--	0.026	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04380	--	--	--	--	--	0.054	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02610	--	--	--	0.0012	--	0.0273	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082211	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	06/24/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5390	Odometer Units	K
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)	704.789513	--
FE BAG 1 (Bag 1 Fuel Economy)	12.3049808	12.3049808
CO2 BAG 2 (Bag 2 Carbon Dioxide)	799.9237915	--
FE BAG 2 (Bag 2 Fuel Economy)	10.8775727	10.8775727
CO2 BAG 3 (Bag 3 Carbon Dioxide)	605.4056009	--
FE BAG 3 (Bag 3 Fuel Economy)	14.3606178	14.3606178
METHANE (CH4 - Methane)	0.0064659	--
CO (Carbon Monoxide)	0.364963	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.438276	--
DT-EER (Drive Trace Energy Economy Rating)	0.9368818	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.682425	--
MFR FE (Manufacturer Fuel Economy)	12	12
NOX (Nitrogen Oxide)	0.0284607	--
HC-NM (Non-methane Hydrocarbon)	0.0356135	--
NMOG (Non-methane organic gases)	0.0392	--
HC-TOTAL (Total Hydrocarbon)	0.041068	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	727	--

Manufacturer Test Comments

4k FED. FUEL 50'F FTP - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	0.36	--	--	--	--	--	0.4	2.1	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG	0.0392	--	1.0998	--	--	--	0.039	99.999	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0677	--	--	--	--	--	0.068	0.250	Pass
CA	4,000 miles	California LEV-IV ULEV125	NOX	0.0285	--	--	--	--	--	0.028	99.999	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082212	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	07/07/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5605	Odometer Units	K
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)	770.375431	--
FE BAG 1 (Bag 1 Fuel Economy)	11.1663167	11.1663167
CO2 BAG 2 (Bag 2 Carbon Dioxide)	821.2649804	--
FE BAG 2 (Bag 2 Fuel Economy)	10.5912485	10.5912485
CO2 BAG 3 (Bag 3 Carbon Dioxide)	619.0441475	--
FE BAG 3 (Bag 3 Fuel Economy)	14.0403479	14.0403479
METHANE (CH4 - Methane)	0.0195785	--
CO (Carbon Monoxide)	1.1125913	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.318504	--
DT-EER (Drive Trace Energy Economy Rating)	1.117058	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.025369	--
MFR FE (Manufacturer Fuel Economy)	11.5	11.5
NOX (Nitrogen Oxide)	0.034722	--
HC-NM (Non-methane Hydrocarbon)	0.1455983	--
NMOG (Non-methane organic gases)	0.1601	--
HC-TOTAL (Total Hydrocarbon)	0.1644252	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	755	--

Manufacturer Test Comments

4k Cold-CO - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	1.11	--	--	--	0.1100	--	1.2	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	HC-NM	0.15	--	--	--	0.0063	--	0.2	0.5	Pass
CA	50,000 miles	California LEV-IV ULEV125	CO	1.11	--	--	--	0.1100	--	1.2	12.5	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082204	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4900	Odometer Units	K
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)	0.004614	--
CO (Carbon Monoxide)	0.2660122	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.1684338	--
DT-EER (Drive Trace Energy Economy Rating)	0.2007713	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.0823305	--
MFR FE (Manufacturer Fuel Economy)	22.2	22.2
NOX (Nitrogen Oxide)	0.0058678	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0013956	--
NMOG (Non-methane organic gases)	0.0014	--
PM (Particulate Matter)	0.0001512	--
HC-TOTAL (Total Hydrocarbon)	0.005945	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	391	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	391	--

Manufacturer Test Comments 4k HWFET - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	--	--	--	0.4300	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0014	--	1.0300	--	0.0088	--	0.010	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0073	--	--	--	--	--	0.017	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0059	--	--	--	0.0012	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0014	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0073	--	--	--	--	--	0.017	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0059	--	--	--	0.0012	--	0.007	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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082208	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5046	Odometer Units	K
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)	0.0075697	--
CO (Carbon Monoxide)	0.3344202	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.337945	--
DT-EER (Drive Trace Energy Economy Rating)	0.071086	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.275658	--
MFR FE (Manufacturer Fuel Economy)	22.2	22.2
NOX (Nitrogen Oxide)	0.0059278	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0064151	--
NMOG (Non-methane organic gases)	0.0066	--
PM (Particulate Matter)	0.0003336	--
HC-TOTAL (Total Hydrocarbon)	0.0138788	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	399	399

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	398	--

Manufacturer Test Comments

4k HWFET - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	399	--	--	--	0.4300	--	399	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0066	--	1.0300	--	0.0088	--	0.015	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0125	--	--	--	--	--	0.022	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0059	--	--	--	0.0012	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0066	--	1.0300	--	0.0088	--	0.015	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0125	--	--	--	--	--	0.022	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0059	--	--	--	0.0012	--	0.007	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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082205	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4932	Odometer Units	K
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)	856.5208794	--
FE BAG 1 (Bag 1 Fuel Economy)	10.1450538	10.1450538
CO2 BAG 2 (Bag 2 Carbon Dioxide)	458.204216	--
FE BAG 2 (Bag 2 Fuel Economy)	18.9706498	18.9706498
METHANE (CH4 - Methane)	0.0081825	--
CO (Carbon Monoxide)	0.3951496	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.7998266	--
DT-EER (Drive Trace Energy Economy Rating)	0.1149428	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.924214	--
MFR FE (Manufacturer Fuel Economy)	15.9	15.9
NOX (Nitrogen Oxide)	0.0203815	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0095468	--
NMOG (Non-methane organic gases)	0.0098	--
PM (Particulate Matter)	0.0033803	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0299	--
HC-TOTAL (Total Hydrocarbon)	0.0176148	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	547	--

Manufacturer Test Comments 4k US06 - Tested as AUDI dr. - ETW: 6000

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	0.40	--	--	--	0.3300	--	0.7	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0098	--	1.0300	--	0.0088	--	0.019	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0204	--	--	--	0.0012	--	0.022	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0034	--	--	--	0.0006	--	0.004	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.40	--	--	--	0.3300	--	0.7	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0098	--	1.0300	--	0.0088	--	0.019	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.03018	--	--	--	--	--	0.040	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02038	--	--	--	0.0012	--	0.0216	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0034	--	--	--	0.0006	--	0.004	0.006	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082209	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5079	Odometer Units	K
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)	860.5440785	--
FE BAG 1 (Bag 1 Fuel Economy)	10.2638899	10.2638899
CO2 BAG 2 (Bag 2 Carbon Dioxide)	461.1304862	--
FE BAG 2 (Bag 2 Fuel Economy)	19.1631953	19.1631953
METHANE (CH4 - Methane)	0.013991	--
CO (Carbon Monoxide)	0.6835378	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.1686164	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4631604	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.3761163	--
MFR FE (Manufacturer Fuel Economy)	16.1	16.1
NOX (Nitrogen Oxide)	0.0230086	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0239455	--
NMOG (Non-methane organic gases)	0.0247	--
PM (Particulate Matter)	0.0012843	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.047	--
HC-TOTAL (Total Hydrocarbon)	0.0377406	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	550	--

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family					VVGAR0182NCM		
Manufacturer Test Comments		4k US06 - Tested as AUDI dr. - ETW: 6000										
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	0.68	--	--	--	0.3300	--	1.0	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0247	--	1.0300	--	0.0088	--	0.034	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0230	--	--	--	0.0012	--	0.024	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0013	--	--	--	0.0006	--	0.002	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.68	--	--	--	0.3300	--	1.0	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0247	--	1.0300	--	0.0088	--	0.034	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04771	--	--	--	--	--	0.058	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02301	--	--	--	0.0012	--	0.0242	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0013	--	--	--	0.0006	--	0.002	0.006	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082206	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4958	Odometer Units	K
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	--
CO (Carbon Monoxide)	0.1756362	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.5563268	--
DT-EER (Drive Trace Energy Economy Rating)	0.3026472	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.641044	--
MFR FE (Manufacturer Fuel Economy)	12.2	12.2
NOX (Nitrogen Oxide)	0.0256068	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0008621	--
NMOG (Non-methane organic gases)	0.0009	--
PM (Particulate Matter)	0.0011192	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0265	--
HC-TOTAL (Total Hydrocarbon)	0.0002186	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	713	--

Manufacturer Test Comments

4k SC03 - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	0.18	--	--	--	0.3300	--	0.5	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0009	--	1.0300	--	0.0088	--	0.010	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0256	--	--	--	0.0012	--	0.027	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0009	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.02651	--	--	--	--	--	0.036	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02561	--	--	--	0.0012	--	0.0268	99.9990	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Test #	RVGA10082210	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5104	Odometer Units	K
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	--
CO (Carbon Monoxide)	0.2261384	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.217217	--
DT-EER (Drive Trace Energy Economy Rating)	0.5288987	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.268954	--
MFR FE (Manufacturer Fuel Economy)	11.9	11.9
NOX (Nitrogen Oxide)	0.0260041	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0007352	--
NMOG (Non-methane organic gases)	0.0008	--
PM (Particulate Matter)	0.0013214	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0267	--
HC-TOTAL (Total Hydrocarbon)	0.0005957	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	746	--

Manufacturer Test Comments

4k SC03 - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0182NCM		
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	0.23	--	--	--	0.3300	--	0.6	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0008	--	1.0300	--	0.0088	--	0.010	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0260	--	--	--	0.0012	--	0.027	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.23	--	--	--	0.3300	--	0.6	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0008	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.02680	--	--	--	--	--	0.037	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02600	--	--	--	0.0012	--	0.0272	99.9990	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Fuel Properties			
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	02/15/2023	Fuel Batch Calibration Ineffective Date	02/14/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	NK0014	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	10/04/2022
Fuel Batch Calibration Effective Date	01/16/2023	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	0.737
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18479
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.865	Weight Fraction CO2	--
Fuel Batch ID	CAFW17	Fuel Calibration Number	745
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	12/14/2017
Fuel Batch Calibration Effective Date	12/14/2017	Fuel Batch Calibration Ineffective Date	12/31/2022
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17789
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	NK0013	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	12/13/2022	Fuel Batch Calibration Ineffective Date	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	IG0025	Fuel Calibration Number	3
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	01/19/2023	Fuel Batch Calibration Ineffective Date	01/19/2024
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	IG0025	Fuel Calibration Number	5
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	03/10/2023	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	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	IG0025	Fuel Calibration Number	2
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	11/28/2022	Fuel Batch Calibration Ineffective Date	11/28/2023
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 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	--	--	--	--	--	--	0.4300	999
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.999

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-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	--	--	--	--	--	--	0.3300	9.6
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.150
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.006

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	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	--	--	--	--	--	--	0.3300	99.0
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.000
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.006

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-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	--	--	--	--	--	--	0.3300	2.1
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	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	--	--	--	--	--	--	0.4300	999
120,000 miles	METHANE	--	--	--	--	--	--	0.0018	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0005	0.010
150,000 miles	CO	--	--	--	--	--	--	0.3300	2.1
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	1.0998	--	--	--	0.0088	99.000
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.110
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.003

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0182NCM		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV125		
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	--	--	--	--	--	--	0.3300	2.1	
150,000 miles	NMOG	--	--	1.0998	--	--	--	0.0088	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990	
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.003	

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV125		
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	--	--	--	--	--	--	--	2.1	
4,000 miles	NMOG	--	--	1.0998	--	--	--	--	99.999	
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.250	
4,000 miles	NOX	--	--	--	--	--	--	--	99.999	

Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			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	--	--	--	--	--	--	0.3300	99.0	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.000	
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000	

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0182NCM		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-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	--	--	--	--	--	--	0.1100	12.5	

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-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	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.999	

Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			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	--	--	--	--	--	--	0.1100	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0.0063	0.5	

Evaporative/Refueling Standards

Evaporative/Refueling Family		VVGAR0182NCM			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	--	0.20	0.007					

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM		
Evaporative/Refueling Family	VVGAR0182NCM	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal Fuel Running Loss				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.050	0.000
Evaporative/Refueling Family	VVGAR0182NCM	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	--	0.20	0.007
Evaporative/Refueling Family	VVGAR0182NCM	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Evap Canister Bleed Test				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	--
Evaporative/Refueling Family	VVGAR0182NCM	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.0110
Evaporative/Refueling Family	VVGAR0182NCM	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	--	0.450	0.014

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM		
Evaporative/Refueling Family	VVGAR0182NCM	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	--	0.050	0.000
Evaporative/Refueling Family	VVGAR0182NCM	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	VVGAR0182NCM	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	--	0.450	0.011
Evaporative/Refueling Family	VVGAR0182NCM	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel 3-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.0140

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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		VVGAT04.0NAV	Evaporative/Refueling Family		VVGAR0182NCM
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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0182NCM
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

Certification Summary Information Report

Manufacturer	Volkswagen Group of America, Inc.	Manufacturer Code	VGA
Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	04/21/2026 09:40:29 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 fuel injection	No

Hybrid Indicator	No		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	No
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	No
Fuel Cell Indicator	No	EPA Vehicle Class	LDT4
Federal Clean Fuel Vehicle	No	Federal Clean Fuel Vehicle Standard	--
Federal Clean Fuel Vehicle ILEV	No	California Partial Zero Emissions Vehicle Indicator	No
Durability Group Name	VVGAGPGNNNAV	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	05/18/2026	CAP2000 Conditional Certificate?	N/A
Independent Commercial Importer?	--	Alternative Fuel Converter Certificate?	--
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	VVGAJ04.0NAT
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	3
OBD Deficiencies Comments	2027 MY system design with 2 deficiencies for SAE J1979-2 implementation and PID \$54 evaporative system pressure sensor scan tool output and 1 deficiency for SAE J1979-2 implementation for test group VVGAV03.0N7M, VVGAJ03.0N7N, VVGAJ04.0NAT, and VVGAT04.0NAV		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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Evaporative/Refueling Family Information

Evaporative Summary Information Type	New	Submission/Correction Date	04/10/2026 11:17:42 AM
Integrated ORVR?	Yes	Fuel(s)	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Plastic	Fuel Tank Material Description	high-density-polyethylene in multi layer plastic with EVOH-barrier
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)	155	Number of Primary Canisters	1
Number of Bleed Canisters	1	Bleed Canister Total Working Capacity (grams)	10
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
VVGAR0155ECR-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.	3 - Bentley	71 - Bentayga EWB	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Volkswagen Group of America, Inc.	3 - Bentley	33 - Bentayga	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Volkswagen Group of America, Inc.	3 - Bentley	33 - Bentayga	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Volkswagen Group of America, Inc.	3 - Bentley	71 - Bentayga EWB	Federal	All Wheel Drive	Semi-Automatic	8	Yes

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Engine Description			
Hybrid Type	--	Hybrid Description	--
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W40 VW50200 / VW50500
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
Substrate Construction			
			Monolith
			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)	4.0	Engine Rated Horsepower	500
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Applies to DWRB var: 0		

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Engine Configuration Number 2			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	641
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	DWNG		

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Engine Configuration Number 3			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	542
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	Yes		
Cylinder Deactivation Description	Fuel saving by reduction of active cylinders. Mechanical deactivation of 4 inlet and outlet vales with injection cut-off on these 4 cylinders.		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	The variable valve timing is a substantial engine feature for: ? Reducing engine out emissions ? Optimizing full load performance ? Optimizing fuel consumption ? Reducing engine roughness Adjust the inlet and outlet camshaft position continuously between retard and advanced position.		
Variable Valve Lift?	No		
Variable Valve Lift System Description	--		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	Not Applicable	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	DWRA		

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		RVGA10082203	RVGA10082205	RVGA10082206	RVGA10082212	RVGA10082204	12.2	228.2	23.7	286.1	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR						
Emission Data Vehicle Information									
Vehicle ID / Configuration	EC-9YA-19 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	KPRXT03.0CV6	Original Evaporative/Refueling Family	KPRXR0150RED						
Original Test Vehicle Model Year	2019								
Vehicle Model									
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </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	0.9982						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	DCB	Rated Horsepower	332						
Displacement (liters)	3								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	1	Air Aspiration Device Configuration	Single						
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Rear						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	4696	Equivalent Test Weight (pounds)	5000						
GVWR (lbs)	6239	N/V Ratio	48.8						
Axle Ratio	3.21								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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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	49.458	0.71636	0.01991	49.458	0.71636	0.01991	18
Cold CO	49.458	0.71636	0.01991	49.458	0.71636	0.01991	N/A
US06	49.458	0.71636	0.01991	49.458	0.71636	0.01991	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments Evap test vehicle for base Cayenne, Cayenne S, and Cayenne Turbo

Test #	KPRX10054422	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	KPRX10054420	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	05/13/2018	Fuel	Gasoline
Fuel Batch ID	EK1603	Fuel Calibration Number	6
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Porsche Cars North America		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4282	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.3559	--

Manufacturer Test Comments new E3 (all non-hybrid Cayenne models) evap system; Porsche test number 1814412

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	0.3559	0.0067	0.363	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.3559	0.0067	0.363	0.450	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	KPRX91004097	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	KPRX91004096	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	10/24/2018	Fuel	Gasoline
Fuel Batch ID	26596	Fuel Calibration Number	2
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4652	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	No

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.222484	--

Manufacturer Test Comments Hot_Soak_HC_(g) = 0.038368, Diurnal (gHC) = 0.184116

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	0.2225	0.003	0.226	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2225	0.003	0.226	0.450	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	KPRX10054427	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	KPRX10054420	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	05/19/2018	Fuel	Gasoline
Fuel Batch ID	EK1603	Fuel Calibration Number	6
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Porsche Cars North America		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4268	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	Yes
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

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	--

Manufacturer Test Comments

new "E3" (all non-hybrid Cayenne models); E10 fuel; Porsche test number 1814943

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	0.000	0	0.00	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0000	0	0.000	0.050	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	KPRX10054428	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	KPRX10054426	Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)
Test Date	05/30/2018	Fuel	Gasoline
Fuel Batch ID	CAFW17	Fuel Calibration Number	745
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	VW: VGA/7		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4293	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC (Hydrocarbon for Running Loss and ORVR)	0.036	--

Manufacturer Test Comments new "E3" (all non-hybrid Cayenne models); E10 fuel; Porsche test number ORVR-264-18

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.036	0.005	0.04	0.20	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.036	0.005	0.04	0.20	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	KPRX10054425	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	05/26/2018	Fuel	N/A
Fuel Batch ID	CAFW17	Fuel Calibration Number	745
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	VW: VGA/7		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4303	Odometer Units	M
4WD Test Dyno	No	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.009	--

Manufacturer Test Comments new "E3" (all non-hybrid Cayenne models); E10 fuel; Porsche test number E48-255-18 (VW Wolfsburg)

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR						
Emission Data Vehicle Information									
Vehicle ID / Configuration	RNAV-SQ8 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	RVGAT04.0NAV	Original Evaporative/Refueling Family	RVGAR0182NCM						
Original Test Vehicle Model Year	2024								
Vehicle Model									
Represented Test Vehicle Make	Audi	Represented Test Vehicle Model	SQ8						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </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	0.9878						
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor								
Odometer Correction Units	Kilometers								
Engine Code	DWRB	Rated Horsepower	500						
Displacement (liters)	4								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5534	Equivalent Test Weight (pounds)	6000						
GVWR (lbs)	6581	N/V Ratio	23.2						
Axle Ratio	3.2								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0155ECR
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	68.69	0.1946	0.02976	10.89	0.0688	0.02783	20.4	
Cold CO	75.57	0.2141	0.03274	6.7	-0.0016	0.03101	N/A	
US06	68.69	0.1946	0.02976	10.89	0.0688	0.02783	N/A	
Emission Control Device Comments	--							
Manufacturer Test Vehicle Comments	Tested in S-Mode							

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082203	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4883	Odometer Units	K
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)	660.4015524	--
FE BAG 1 (Bag 1 Fuel Economy)	13.1547526	13.1547526
CO2 BAG 2 (Bag 2 Carbon Dioxide)	786.7064101	--
FE BAG 2 (Bag 2 Fuel Economy)	11.0605716	11.0605716
CO2 BAG 3 (Bag 3 Carbon Dioxide)	604.6102631	--
FE BAG 3 (Bag 3 Fuel Economy)	14.386089	14.386089
METHANE (CH4 - Methane)	0.0026609	--
CO (Carbon Monoxide)	0.1842126	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.454654	--
DT-EER (Drive Trace Energy Economy Rating)	0.6096428	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.888181	--
MFR FE (Manufacturer Fuel Economy)	12.2	12.2
NOX (Nitrogen Oxide)	0.0286465	--
N2O (Nitrous Oxide)	0.0005749	--
HC-NM (Non-methane Hydrocarbon)	0.0154574	--
NMOG (Non-methane organic gases)	0.017	--
PM (Particulate Matter)	0.0013648	--
HC-TOTAL (Total Hydrocarbon)	0.0177436	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	711	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	711	--

Manufacturer Test Comments 4k FED. FUEL FTP - Tested as AUDI dr. - ETW: 6000

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	--	--	--	0.4300	--	999	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0027	--	--	--	0.0018	--	0.004	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0006	--	--	--	0.0005	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO-COMP	0.57	--	--	--	--	--	0.6	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0170	--	1.0998	--	0.0088	--	0.026	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0456	--	--	--	--	--	0.056	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX-COMP	0.0442	--	--	--	--	--	0.044	0.110	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0286	--	--	--	0.0012	--	0.030	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0170	--	1.0998	--	0.0088	--	0.026	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04565	--	--	--	--	--	0.056	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02865	--	--	--	0.0012	--	0.0298	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass

NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082207	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	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5029	Odometer Units	K
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)	654.9260814	--
FE BAG 1 (Bag 1 Fuel Economy)	13.4866424	13.4866424
CO2 BAG 2 (Bag 2 Carbon Dioxide)	784.3696426	--
FE BAG 2 (Bag 2 Fuel Economy)	11.2877753	11.2877753
CO2 BAG 3 (Bag 3 Carbon Dioxide)	599.7490786	--
FE BAG 3 (Bag 3 Fuel Economy)	14.7560699	14.7560699
METHANE (CH4 - Methane)	0.0030533	--
CO (Carbon Monoxide)	0.2452017	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.221136	--
DT-EER (Drive Trace Energy Economy Rating)	1.29503	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.502212	--
MFR FE (Manufacturer Fuel Economy)	12.5	12.5
NOX (Nitrogen Oxide)	0.0260963	--
N2O (Nitrous Oxide)	0.0004191	--
HC-NM (Non-methane Hydrocarbon)	0.0171843	--
NMOG (Non-methane organic gases)	0.0177	--
PM (Particulate Matter)	0.0013588	--
HC-TOTAL (Total Hydrocarbon)	0.0201256	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	707	707

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family					VVGAR0155ECR		
		Test Result Name		Unrounded Test Result			Verify Calculated CO2					
		Carbon dioxide		707			--					
Manufacturer Test Comments		4k FED. FUEL FTP - Tested as AUDI dr. - ETW: 6000										
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	707	--	--	--	0.4300	--	707	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0031	--	--	--	0.0018	--	0.005	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0004	--	--	--	0.0005	--	0.001	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.25	--	--	--	0.3300	--	0.6	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0177	--	1.0998	--	0.0088	--	0.026	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0438	--	--	--	--	--	0.054	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0261	--	--	--	0.0012	--	0.027	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.25	--	--	--	0.3300	--	0.6	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0177	--	1.0998	--	0.0088	--	0.026	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04380	--	--	--	--	--	0.054	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02610	--	--	--	0.0012	--	0.0273	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0014	--	--	--	0.0006	--	0.002	0.003	Pass
NOTE: For Non-charge depleting tests, the Rounded Result for CREE/OPT-CREE Emission names are Verify-calculated values.												

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082211	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	06/24/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5390	Odometer Units	K
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)	704.789513	--
FE BAG 1 (Bag 1 Fuel Economy)	12.3049808	12.3049808
CO2 BAG 2 (Bag 2 Carbon Dioxide)	799.9237915	--
FE BAG 2 (Bag 2 Fuel Economy)	10.8775727	10.8775727
CO2 BAG 3 (Bag 3 Carbon Dioxide)	605.4056009	--
FE BAG 3 (Bag 3 Fuel Economy)	14.3606178	14.3606178
METHANE (CH4 - Methane)	0.0064659	--
CO (Carbon Monoxide)	0.364963	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.438276	--
DT-EER (Drive Trace Energy Economy Rating)	0.9368818	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.682425	--
MFR FE (Manufacturer Fuel Economy)	12	12
NOX (Nitrogen Oxide)	0.0284607	--
HC-NM (Non-methane Hydrocarbon)	0.0356135	--
NMOG (Non-methane organic gases)	0.0392	--
HC-TOTAL (Total Hydrocarbon)	0.041068	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	727	--

Manufacturer Test Comments

4k FED. FUEL 50'F FTP - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	0.36	--	--	--	--	--	0.4	2.1	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG	0.0392	--	1.0998	--	--	--	0.039	99.999	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0677	--	--	--	--	--	0.068	0.250	Pass
CA	4,000 miles	California LEV-IV ULEV125	NOX	0.0285	--	--	--	--	--	0.028	99.999	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082212	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	07/07/2023	Fuel	Gasoline
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Ingolstadt		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5605	Odometer Units	K
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)	770.375431	--
FE BAG 1 (Bag 1 Fuel Economy)	11.1663167	11.1663167
CO2 BAG 2 (Bag 2 Carbon Dioxide)	821.2649804	--
FE BAG 2 (Bag 2 Fuel Economy)	10.5912485	10.5912485
CO2 BAG 3 (Bag 3 Carbon Dioxide)	619.0441475	--
FE BAG 3 (Bag 3 Fuel Economy)	14.0403479	14.0403479
METHANE (CH4 - Methane)	0.0195785	--
CO (Carbon Monoxide)	1.1125913	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.318504	--
DT-EER (Drive Trace Energy Economy Rating)	1.117058	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.025369	--
MFR FE (Manufacturer Fuel Economy)	11.5	11.5
NOX (Nitrogen Oxide)	0.034722	--
HC-NM (Non-methane Hydrocarbon)	0.1455983	--
NMOG (Non-methane organic gases)	0.1601	--
HC-TOTAL (Total Hydrocarbon)	0.1644252	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	755	--

Manufacturer Test Comments

4k Cold-CO - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	1.11	--	--	--	0.1100	--	1.2	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	HC-NM	0.15	--	--	--	0.0063	--	0.2	0.5	Pass
CA	50,000 miles	California LEV-IV ULEV125	CO	1.11	--	--	--	0.1100	--	1.2	12.5	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082204	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4900	Odometer Units	K
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)	0.004614	--
CO (Carbon Monoxide)	0.2660122	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.1684338	--
DT-EER (Drive Trace Energy Economy Rating)	0.2007713	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.0823305	--
MFR FE (Manufacturer Fuel Economy)	22.2	22.2
NOX (Nitrogen Oxide)	0.0058678	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0013956	--
NMOG (Non-methane organic gases)	0.0014	--
PM (Particulate Matter)	0.0001512	--
HC-TOTAL (Total Hydrocarbon)	0.005945	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	391	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	391	--

Manufacturer Test Comments 4k HWFET - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	--	--	--	0.4300	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0014	--	1.0300	--	0.0088	--	0.010	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0073	--	--	--	--	--	0.017	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0059	--	--	--	0.0012	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0014	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0073	--	--	--	--	--	0.017	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0059	--	--	--	0.0012	--	0.007	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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082208	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5046	Odometer Units	K
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)	0.0075697	--
CO (Carbon Monoxide)	0.3344202	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.337945	--
DT-EER (Drive Trace Energy Economy Rating)	0.071086	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.275658	--
MFR FE (Manufacturer Fuel Economy)	22.2	22.2
NOX (Nitrogen Oxide)	0.0059278	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0064151	--
NMOG (Non-methane organic gases)	0.0066	--
PM (Particulate Matter)	0.0003336	--
HC-TOTAL (Total Hydrocarbon)	0.0138788	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	399	399

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	398	--

Manufacturer Test Comments

4k HWFET - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	399	--	--	--	0.4300	--	399	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0066	--	1.0300	--	0.0088	--	0.015	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0125	--	--	--	--	--	0.022	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0059	--	--	--	0.0012	--	0.007	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0066	--	1.0300	--	0.0088	--	0.015	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0125	--	--	--	--	--	0.022	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0059	--	--	--	0.0012	--	0.007	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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082205	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4932	Odometer Units	K
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)	856.5208794	--
FE BAG 1 (Bag 1 Fuel Economy)	10.1450538	10.1450538
CO2 BAG 2 (Bag 2 Carbon Dioxide)	458.204216	--
FE BAG 2 (Bag 2 Fuel Economy)	18.9706498	18.9706498
METHANE (CH4 - Methane)	0.0081825	--
CO (Carbon Monoxide)	0.3951496	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.7998266	--
DT-EER (Drive Trace Energy Economy Rating)	0.1149428	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.924214	--
MFR FE (Manufacturer Fuel Economy)	15.9	15.9
NOX (Nitrogen Oxide)	0.0203815	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0095468	--
NMOG (Non-methane organic gases)	0.0098	--
PM (Particulate Matter)	0.0033803	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0299	--
HC-TOTAL (Total Hydrocarbon)	0.0176148	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	547	--

Manufacturer Test Comments 4k US06 - Tested as AUDI dr. - ETW: 6000

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	0.40	--	--	--	0.3300	--	0.7	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0098	--	1.0300	--	0.0088	--	0.019	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0204	--	--	--	0.0012	--	0.022	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0034	--	--	--	0.0006	--	0.004	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.40	--	--	--	0.3300	--	0.7	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0098	--	1.0300	--	0.0088	--	0.019	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.03018	--	--	--	--	--	0.040	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02038	--	--	--	0.0012	--	0.0216	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0034	--	--	--	0.0006	--	0.004	0.006	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082209	Test Procedure	90 - US06
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5079	Odometer Units	K
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)	860.5440785	--
FE BAG 1 (Bag 1 Fuel Economy)	10.2638899	10.2638899
CO2 BAG 2 (Bag 2 Carbon Dioxide)	461.1304862	--
FE BAG 2 (Bag 2 Fuel Economy)	19.1631953	19.1631953
METHANE (CH4 - Methane)	0.013991	--
CO (Carbon Monoxide)	0.6835378	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.1686164	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4631604	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.3761163	--
MFR FE (Manufacturer Fuel Economy)	16.1	16.1
NOX (Nitrogen Oxide)	0.0230086	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0239455	--
NMOG (Non-methane organic gases)	0.0247	--
PM (Particulate Matter)	0.0012843	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.047	--
HC-TOTAL (Total Hydrocarbon)	0.0377406	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	550	--

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family					VVGAR0155ECR		
Manufacturer Test Comments		4k US06 - Tested as AUDI dr. - ETW: 6000										
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	0.68	--	--	--	0.3300	--	1.0	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0247	--	1.0300	--	0.0088	--	0.034	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0230	--	--	--	0.0012	--	0.024	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0013	--	--	--	0.0006	--	0.002	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.68	--	--	--	0.3300	--	1.0	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0247	--	1.0300	--	0.0088	--	0.034	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.04771	--	--	--	--	--	0.058	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02301	--	--	--	0.0012	--	0.0242	99.9990	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0013	--	--	--	0.0006	--	0.002	0.006	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082206	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	05/24/2023	Fuel	Gasoline
Fuel Batch ID	NK0013	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4958	Odometer Units	K
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	--
CO (Carbon Monoxide)	0.1756362	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.5563268	--
DT-EER (Drive Trace Energy Economy Rating)	0.3026472	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.641044	--
MFR FE (Manufacturer Fuel Economy)	12.2	12.2
NOX (Nitrogen Oxide)	0.0256068	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0008621	--
NMOG (Non-methane organic gases)	0.0009	--
PM (Particulate Matter)	0.0011192	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0265	--
HC-TOTAL (Total Hydrocarbon)	0.0002186	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	713	--

Manufacturer Test Comments

4k SC03 - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	0.18	--	--	--	0.3300	--	0.5	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0009	--	1.0300	--	0.0088	--	0.010	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0256	--	--	--	0.0012	--	0.027	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.18	--	--	--	0.3300	--	0.5	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0009	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.02651	--	--	--	--	--	0.036	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02561	--	--	--	0.0012	--	0.0268	99.9990	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Test #	RVGA10082210	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	05/26/2023	Fuel	Gasoline
Fuel Batch ID	NK0014	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5104	Odometer Units	K
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	--
CO (Carbon Monoxide)	0.2261384	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.217217	--
DT-EER (Drive Trace Energy Economy Rating)	0.5288987	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.268954	--
MFR FE (Manufacturer Fuel Economy)	11.9	11.9
NOX (Nitrogen Oxide)	0.0260041	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0007352	--
NMOG (Non-methane organic gases)	0.0008	--
PM (Particulate Matter)	0.0013214	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0267	--
HC-TOTAL (Total Hydrocarbon)	0.0005957	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	746	--

Manufacturer Test Comments

4k SC03 - Tested as AUDI dr. - ETW: 6000

Certification Summary Information Report

Test Group		VVGAT04.0NAV				Evaporative/Refueling Family				VVGAR0155ECR		
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	0.23	--	--	--	0.3300	--	0.6	99.0	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0008	--	1.0300	--	0.0088	--	0.010	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0260	--	--	--	0.0012	--	0.027	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.23	--	--	--	0.3300	--	0.6	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0008	--	1.0300	--	0.0088	--	0.010	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.02680	--	--	--	--	--	0.037	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.02600	--	--	--	0.0012	--	0.0272	99.9990	Pass

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Fuel Properties			
Fuel Batch ID	IG0025	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	02/15/2023	Fuel Batch Calibration Ineffective Date	02/14/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	NK0014	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	10/04/2022
Fuel Batch Calibration Effective Date	01/16/2023	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	0.737
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18479
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.865	Weight Fraction CO2	--
Fuel Batch ID	CAFW17	Fuel Calibration Number	745
Test Fuel Type	48 - Tier 3 E10 Regular Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	12/14/2017
Fuel Batch Calibration Effective Date	12/14/2017	Fuel Batch Calibration Ineffective Date	12/31/2022
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.751
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17789
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	NK0013	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/24/2022
Fuel Batch Calibration Effective Date	12/13/2022	Fuel Batch Calibration Ineffective Date	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR015SECR
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.753
Fuel Ethanol Volume Percent (%)	9.8	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17949
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	26596	Fuel Calibration Number	2
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	05/10/2017
Fuel Batch Calibration Effective Date	05/10/2017	Fuel Batch Calibration Ineffective Date	05/10/2032
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18010
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.823	Weight Fraction CO2	--
Fuel Batch ID	EK1603	Fuel Calibration Number	6
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	12/26/2016
Fuel Batch Calibration Effective Date	12/30/2016	Fuel Batch Calibration Ineffective Date	12/31/2018
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.76
Fuel Ethanol Volume Percent (%)	9.5	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17785
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.832	Weight Fraction CO2	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 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	--	--	--	--	--	--	0.4300	999
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.999

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-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	--	--	--	--	--	--	0.3300	9.6
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.150
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.006

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	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	--	--	--	--	--	--	0.3300	99.0
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.000
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.006

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-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	--	--	--	--	--	--	0.3300	2.1
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990

Cert Region	Federal	Cert/In-Use Code	Both
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	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	--	--	--	--	--	--	0.4300	999
120,000 miles	METHANE	--	--	--	--	--	--	0.0018	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0005	0.010
150,000 miles	CO	--	--	--	--	--	--	0.3300	2.1
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	1.0998	--	--	--	0.0088	99.000
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.110
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.003

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0155ECR		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV125		
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	--	--	--	--	--	--	0.3300	2.1
150,000 miles	NMOG	--	--	1.0998	--	--	--	0.0088	99.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.9990
150,000 miles	PM	--	--	--	--	--	--	0.0006	0.003

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV125		
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	--	--	--	--	--	--	--	2.1
4,000 miles	NMOG	--	--	1.0998	--	--	--	--	99.999
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.250
4,000 miles	NOX	--	--	--	--	--	--	--	99.999

Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			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	--	--	--	--	--	--	0.3300	99.0
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.000
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.000

Certification Summary Information Report

Test Group		VVGAT04.0NAV			Evaporative/Refueling Family			VVGAR0155ECR		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-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	--	--	--	--	--	--	0.1100	12.5	

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-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	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0088	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0012	99.999	

Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			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	--	--	--	--	--	--	0.1100	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0.0063	0.5	

Evaporative/Refueling Standards

Evaporative/Refueling Family		VVGAR0155ECR			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	--	0.050	0					

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR		
Evaporative/Refueling Family	VVGAR0155ECR	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	--	0.450	0.003
Evaporative/Refueling Family	VVGAR0155ECR	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	--	0.450	0.0067
Evaporative/Refueling Family	VVGAR0155ECR	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel refueling test (ORVR)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.005
Evaporative/Refueling Family	VVGAR0155ECR	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	--	0.20	0.005
Evaporative/Refueling Family	VVGAR0155ECR	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.003

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR		
Evaporative/Refueling Family	VVGAR0155ECR	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	VVGAR0155ECR	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel 3-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.0067
Evaporative/Refueling Family	VVGAR0155ECR	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Evap Canister Bleed Test				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	--
Evaporative/Refueling Family	VVGAR0155ECR	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	--

Certification Summary Information Report

Test Group	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR015SECR
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		VVGAT04.0NAV	Evaporative/Refueling Family		VVGAR0155ECR
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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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	VVGAT04.0NAV	Evaporative/Refueling Family	VVGAR0155ECR
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

8. Emission Testing Waiver Statements

Emissions Continuity Compliance Statement NMOG, CO, CO₂, NO_x, N₂O, CH₄, and HCHO

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1809-12 (e) the Volkswagen Group hereby certifies that based on engineering evaluations of emission testing there is no discontinuity in emission performance of NMOG, CO, CO₂, NO_x, N₂O, CH₄ and HCHO as measured and averaged over the Federal Test Procedure and the Highway Test Procedure in the temperature range of 20°F to 86°F for vehicles in this test group. The normal operation of the emission control system consists of:

(i) Cycling back and forth in a narrow window between rich and lean operation as a result of feedback controls targeted to maintain overall engine operation at stoichiometry.

(ii) Small changes in the target air-fuel ratio to optimize vehicle emissions or drivability. This may be called "closed loop biasing."

(iii) Temporary enrichment in response to rapid throttle motion.

(iv) Enrichment during cold-start and warm-up conditions.

(v) Temporary air/fuel mixture modulation for running OBD checks to comply with California OBD regulations contained in 13 CCR §1968.2.

(vi) Infrequent operation modes, e.g. PM trap regeneration, are certified under special provisions of the CFR". The modulation of the emission control system can cause step changes in emissions and CO₂ depending on the driving condition (engine speed and load). This modulation is not forming a discontinuity in emissions because it is included in the Federal Test Procedures and is working under the same conditions during on-road operation.

91 RON (Knock Sensor): Compliance Statement: (Note: Statement only applies to regular fuel concepts)

In accordance with EPA Guidance Letter CD-14-19 and VPCD-97-01, city and highway fuel economy test result differences between 91 RON operation and 96 RON operation are within 3% and there are no emission increases (beyond normal test variability) using 91 RON fuel with a comparable fuel specification when tested on the FTP or SFTP cycles.

A/C Calibrations – Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (3) there are neither A/C-on specific calibrations nor A/C-on specific "open-loop" or "commanded" air fuel enrichment strategies incorporated into the vehicle design of this Test Group.

Lean Best Torque Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (1) the air fuel ratio is not richer at any time over the US06 cycle than the leanest air fuel ratio required to obtain maximum torque plus a tolerance of four percent. Other enrichments, if applicable e.g. for part protection, are described in the AECD description of the test group (section 16).

Lean-On Cruise Compliance Statement

In accordance with EPA Guidance Letter CD-14-19 and 40 CFR 86.1811-17 (d) (4) there are no "Lean-on-cruise" calibration strategies incorporated into the vehicle design of this test group.

OBD Compliance Statement

The OBD system meets the full intent of both the EPA Tier 3 Regulations contained in CFR Title 40 Part 86.1806-17 and the California OBD regulations contained in 13 CCR §1968.2.

Leak Free Exhaust System Compliance Statement

In accordance with 40 CFR 86.1844-01(d)(16)(i), the Volkswagen Group hereby states that, for vehicles described in this application, as appropriate, it has conducted an engineering analysis of the complete exhaust system to ensure that the exhaust system has been designed:

- A. To facilitate leak-free assembly, installation and operation for the full useful life of the vehicles
- B. To facilitate such repairs as might be necessary on a properly maintained and used vehicle can be performed in such a manner as to maintain leak-free operation, using tools commonly available in a motor vehicle dealership or independent repair shop for the full useful life of the vehicle.

A "leak-free" exhaust system is understood from the engine block to the point in the exhaust system behind the last component of exhaust aftertreatment system (e.g. catalyst). Silencer/muffler and tailpipes are not part of the exhaust aftertreatment system when installed downstream the last component of exhaust aftertreatment. For installation/mounting of the exhaust system clamps and/or flanges are used with a technical leakage specification ensuring compliance with exhaust emission standards in-use. Meaning: The exhaust system is designed to fulfill the lowest leakage according to state-of-the-art exhaust aftertreatment systems.

High Altitude Exhaust Emissions Compliance Statement

In accordance with 40 CFR 86.1829-15 (c), The Volkswagen Group hereby certifies that, based upon engineering evaluation and high-altitude emission tests conducted on similar vehicles, all vehicles of this test group comply with the high-altitude exhaust emissions requirements.

Formaldehyde Emissions Compliance Statement

In accordance with 86.1829-15 (d) (4), and based upon good engineering judgment, the Volkswagen Group hereby states that vehicles certified based upon NMHC emissions comply with the applicable formaldehyde emission standards.

High Altitude Evaporative/Refueling Emissions Compliance Statement

In accordance with 40 CFR 86.1829-01 (b) (2) (ii) (B), the Volkswagen Group hereby certifies that, based upon engineering evaluation and high altitude evaporative/refueling tests conducted on similar vehicles, all vehicles of this test group comply with the high altitude evaporative/refueling emissions requirements.

Spitback Compliance Statement

In accordance with 40 CFR 86.1829-15 (e) (5) the Volkswagen Group hereby certifies that the vehicle inherently meets the Fuel Dispensing Spitback Standard as part of compliance with the refueling emission standard. This certification applies to the full useful life of the vehicle. Testing is therefore not required.

Evaporative Leak Test Compliance Statement

In accordance with 40 CFR 86.1829-15 (e) (4), the Volkswagen Group hereby certifies that, based upon engineering evaluation, all vehicles in the evaporative/refueling emission family comply with the evaporative emission standard outlined in 40 CFR 86.1813-17 (a) (4).

Driver-Selectable modes Compliance Statement

In accordance with EPA Guidance Letter CISD-09-19, all driver-selectable transmission drive modes are deemed to comply with emission standards.

9.0 OBD System Description

9.1 Summary Table

Refer to Section 16 (included in OBD II A – P application)

9.2 California Air Resources Board OBD System Approval Letter.

Refer to Section 16

10. Description of Alternate Fueled Vehicles

Not applicable

11. Auxiliary Emission Control Devices (AECD) Descriptions

Refer to Section 16.2 of this Application

12.0 List of Certified Vehicles

Durability Group	VVGAGPGNNNAV
Test Group	VVGAT04.0NAV
Evap Family	VVGAR0182NCM
Emission Control System:	DFI/2TC/2CAC/2TWC/2WR-HO2S/2HO2S

Engine Displacement:	4.0 liter
Valves per Cylinder:	4
Sales Area:	50 states
MMS:	MG1
SIL:	N/A

Engine Code	Model	Vehicle Class	Engine Code Characteristics			HP @RPM	Torque @RPM [lb-ft]	Trans. / OD	ETW	Curb Weight [lbs]	GVWR [lbs]	Fuel Tank Capacity [Gal]	Canister working capacity [g]	Tire size	N/V Ratio	Start/ Stop [Y/N]
			Cat. Code	Compression ratio	Idle [rpm]											
DWRB	SQ8	LDT4	JM842 (PRE), JM842 (MAIN)	10.1 ±0.3	680±50	500 @5500	568 @2000 - 4000	8	5500	5423	6581	22.5	176	285/40 R22 285/35 R23	23.2 23.3	Y

Durability Group	VVGAGPGNNNAV
Test Group	VVGAT04.0NAV
Evap Family	VVGAR0155ECR
Emission Control System:	DFI/2TC/2CAC/2TWC/2WR-HO2S/2HO2S

Engine Displacement:	4.0 liter
Valves per Cylinder:	4
Sales Area:	50 states
MMS:	MG1
SIL:	N/A

Engine Code	Model	Vehicle Class	Engine Code Characteristics			HP @RPM	Torque @RPM [lb-ft]	Trans. / OD	ETW	Curb Weight [lbs]	GVWR [lbs]	Fuel Tank Capacity [Gal]	Canister working capacity [g]	Tire size	N/V Ratio	Start/ Stop [Y/N]
			Cat. Code	Compression ratio	Idle [rpm]											
DWNG	Bentayga	LDT4	JM842	9.7 ±0.3	700±100	641 @ 6000	627 @2350 - 4500	8	6000	5494	6614	22.5	155	285/35 R23 285/40 R22	23.3 23.2	Y
DWRA	Bentayga	LDT4	JM842	10.1 ±0.3	600±50	542 @5750 - 6000	568 @2000 - 3500	8	6000	5451	7165	22.5	155	285/45_R21 285/40 R22	23.1 23.2	Y
DWRA	Bentayga EWB	LDT4	JM842	10.1 ±0.3	600±50	542 @5750 - 6000	568 @2000 - 3500	8	6000	5643	7165	22.5	155	285/45_R21 285/40 R22	23.1 23.2	Y

12.1 Transmissions

Transmission	Transmission Characteristic												
	Drivetrain	Gear Count	Lock-Up rpm		Gearbox Ratios								
			Gear	min/max	Axle	Gear 1	Gear 2	Gear 3	Gear 4	Gear 5	Gear 6	Gear 7	Gear 8
AL952-8Q	AWD	8	1-8	n.a.	3.205	4.714	3.143	2.106	1.667	1.285	1.000	0.839	0.667

12.2 Test conditions

Model	ETW	Road Track Coefficients						TRL50	TCDT	Fuel Tank Cap.	Fan Pos.	Drive Mode for Testing	Shift Sched. I.D.	Test Fuel	DF Source
		F0	F1	F2	F0	F1	F2								
	[lbs]	[lb*f]	[lb*f/mph]	[lb*f/(mph) ²]	[N]	[N/(km/h)]	[N/(km/h) ²]	[hp]	[s]	40% / 100% [Gal]					
SQ8	6000	68.69	0.1946	0.02976	305.57	0.5379	0.05112	20.4	18.4	9.0/ 22.5	20	S	automatic	Tier 3	PNAT-DDV
SQ8	5500	60.46	0.2118	0.02903	268.94	0.5855	0.04986	19.1	18.0	9.0/ 22.5		D	automatic	Tier 2	PNAT-DDV
SQ8 CND	5500	64.39	0.1933	0.02849	286.43	0.5343	0.04893	19.4	17.8	9.0/ 22.5		D	automatic	Tier 2	PNAT-DDV
Bentayga	6000	54.66	0.0211	0.03127	243.12	0.0583	0.05370	17.9	21.04	9.0/ 22.5		Bentley	automatic	Tier 2	PNAT-DDV
Bentayga	6000	54.06	0.0211	0.03056	240.45	0.0583	0.05248	17.5	21.42	9.0/ 22.5		Bentley	automatic	Tier 2	PNAT-DDV
Bentayga EWB	6000	54.66	0.0211	0.03127	243.12	0.0583	0.05370	17.9	21.04	9.0/ 22.5		Bentley	automatic	Tier 2	PNAT-DDV

Engine Starting procedure:

Press the brake pedal and move the selector lever into the P or N position.

Start engine by turning key to "Start" position or by pushing the Engine "Stop/Start" button.

ESP/ABS Deactivation procedure

Dyno Mode must be activated.

Refer to Section 16 for Dyno Mode activation procedure.

Fan Position during dyno testing:

FTP / HWY = Road Speed Fan (Modulated)

US06 = Road Speed Fan (Modulated)

Automatic Headlight System:

Automatic headlight system must be disabled prior to any emissions or fuel economy / range testing.

Please contact VWGoA Engineering and Environmental Office if you need assistance with disabling the automatic headlights.

Daytime Running Lights (DRL):

Daytime running lights must be disabled prior to fuel economy / range testing. DRLs can be turned off via the infotainment / MMI screen.

Please contact VWGoA Engineering and Environmental Office if you need assistance with disabling the daytime running lights.

12.3 e-Motor Details

Not applicable.

12.4 Battery details

Not applicable.

12.4 Charging details

Not Applicable

13.0 Test Group Projected Sales

Refer to Section 16 of this Test Group Application

13.1 Compliance Plans

Refer to Section 16 of the Common Section

14. Request for Certificate

14.1 Statement of Compliance

The Volkswagen Group states that any element of design, system, or emission control device installed on, or incorporated in the Volkswagen Group's new motor vehicles or new motor vehicle engines for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause the emission into the ambient air of pollutants in the operation of its motor vehicles or motor vehicle engines which cause or contribute to an unreasonable risk to public health or welfare except as specifically permitted by the standards prescribed under section 202 of the Clean Air Act. The Volkswagen Group further states that any element of design, system, or emission control device installed or incorporated in the Volkswagen Group's new motor vehicles or new motor vehicle engines, for the purpose of complying with standards prescribed under section 202 of the Clean Air Act, will not, to the best of the Volkswagen Group's information and belief, cause or contribute to an unreasonable risk to public safety.

The term pollutant means:

- a. Diesel particulates
- b. Nickel
- c. MMT combustion products
- d. Ammonia
- e. Sulfates
- f. Hydrogen sulfide
- g. Hydrogen cyanide
- h. Ruthenium combustion products
- i. Nitrosamines

or any other pollutant which VW/AUDI has identified which can reasonably be expected to be emitted from these vehicles.

All vehicles have been tested in accordance with good engineering practice to ascertain that such test vehicles meet the requirement of this section for the useful life of the vehicle.

The test vehicles with respect to which data are submitted are in all material respects as described in the application for certification have been tested in accordance with the applicable test procedures utilizing the fuels and equipment described in the application for certification they meet the requirement of such tests and on the basis of such tests, they conform to the requirements of the regulations in 40 CFR. Part 86. Subpart S.

The vehicles for which certification is requested conform to the requirements in 86.1810-01 (a) and the description of tests performed to ascertain compliance with the general standards in 86.1810-01 (a) and the data derived from such tests are available.

The testing described under 86.1824-01 has been designed and conducted in accordance with good engineering practice to assure that the vehicles covered by a certificate issued under 86.1848-01 will meet the evaporative emission standards in 86.1811-01 for the useful life of the vehicle.

14.2. Durability Statement

Based on the Volkswagen Group's good engineering judgment, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards

15.3 ORVR Safety Application for Carry-Over ORVR Systems

Volkswagen Group Vehicles use standard technology in all 2026MY vehicles ORVR systems .

In accordance with EPA Guidance Letter CISC-06-06, ORVR applications will not be submitted.

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Dir, Homologation Title
EEO - Certification Department
(248) 754-4396 Phone
Tony.DAmbrosi@vw.com E-Mail

April 2, 2026 Date

Subject: MY 2027 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group VVGAJ04.0NAT with Evaporative Families:
VVGAR0182NCM and VVGAR0176NCT.

Dear Mr. Kimball,

We submit, with this letter, the model year 2027 Part 1 Application for Emissions
Certification for the following Test Group:

<u>Test Group</u>	<u>Standards</u>	<u>Sales Area</u>
VVGAJ04.0NAT	Tier 3 Bin 125 LEVIII ULEV 125	Federal California

Copies of the Certification Fee filing form and OBD approval letter are contained in
sections 15 and 16 of the included electronic application.

All vehicles within this test group comply with all applicable regulations contained in
40 CFR Part 86, Part 1066 and the compliance statements contained in sections 8
and 14.

This submission constitutes our final application and the request for issuance of a
Certificate of Conformity.

If you have any questions with regard to this information please contact our office in
Auburn Hills at (248) 754-4396.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C
Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2026.04.02 09:50:31 -04'00'

Anthony D'Ambrosi
Volkswagen Group of America, Inc.
Engineering and Environmental Office

Enclosure(s)

US EPA Fee Form

[Help and EPA Instructions](#)

* Required Field

General Information

Date: 02/23/2026

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

VGA

Manufacturer Name *

Volkswagen Group of America

Contact Name *

Greg Allen

Contact Email Address *

Gregory.Allen@vw.com

Contact Phone *

248-754-4209

Calendar Year complete application submitted to EPA *

2026

PLEASE NOTE: These fees apply to complete certification applications received by EPA from January 1, 2026, through December 31, 2026. The applicable fee is determined by the

calendar year in which the complete certification application is received, not the model year.

Engine Family / Evaporative Family / Test Group *

VVGAT04.0NAV

Certificate Request Type (Industry Sector Code)

Certificate Request Type *

- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (Federal) (E, H)
- On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V)
- On-Highway Motorcycle (C)
- On-Highway HDV Evap (F)
- On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V)
- On-Highway HDE Dyno Cert (California-Only) (E, H)
- Nonroad CI (L)
- Nonroad SI (B, S)
- Locomotive (G, K)
- All Nonroad Recreational, excluding Marine engines (X, Y)
- All Marine (Including IMO) (M, N, W)
- Component Certification for Evaporative Emissions (P)

IMO Name (Required for dual US/IMO Marine Only)

ICI VIN Number (Required for ICIs Only)

Do you qualify for a Reduced Fee? *

No

Payment Information

Amount Owed

\$32,317.00

Payment Type *

Offline ACH

Comments

MY2027 Certification Fee for VVGAT04.0NAV
Pay.gov Tracking ID: 27VRSFGA
Agency Tracking ID: 77305113539

EPA Form Number 3520-29

OMB Control No. 2060-0545

Approval expires 7/31/2027

The public reporting and recordkeeping burden for this collection of information is estimated to average 12 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed forms to this address.

Robin Lang, Chief
Emissions Certification and Compliance Division
California Air Resources Board
4001 Iowa Avenue
Riverside, California 92507

Anthony D'Ambrosi Name
Dir, Homologation Title
EEO – Certification Department
(248) 754-4396 Phone
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April 2, 2026 Date

Subject: MY 2027 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group VVGAJ04.0NAT with Evaporative Families:
VVGAR0182NCM and VVGAR0176NCT.

Dear Ms. Lang,

We submit, with this letter, the model year 2027 Part 1 Application for Emissions
Certification for the following Test Group:

<u>Test Group</u>	<u>Standards</u>	<u>Sales Area</u>
VVGAJ04.0NAT	Tier 4 Interim Bin 125 LEV3 ULEV 125	Federal California

This submission constitutes our final application and the request for issuance of the
Executive Order.

If you have any questions with regard to this information please contact our office in
Auburn Hills at (248) 754-4396.

Sincerely,

D'Ambrosi Anthony
VWPKI
5406C07D40F4331C
Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2026.04.02 09:49:22 -04'00'

Anthony D'Ambrosi
Volkswagen Group of America, Inc.
Engineering and Environmental Office

Enclosure(s)

California ARB Information

17.1 California Compliance Statement

Production Vehicle same as Test Vehicle Statement

The production vehicles represented by the particular engine families will be in all material respects of the same design as those for which vehicle approval is granted.

Smog Check Compliance Statement

Vehicles in this test group meet California's BAR Smog Check requirement in 16 CCR § 3340.42 by having a compliant OBD system (13 CCR § 1968.2) that will satisfy the California BAR-OIS OBD focused test method and the OBD pass-fail criteria in 16 CCR § 3340.42.2(c).

CARB Fill Pipe Bench Leak Rate Compliance Statement

In accordance with Section VI (Bench Leak Rate Specification) of the Air Resources Board document, "Specifications for fill pipes and openings of 2015 and subsequent model motor vehicle fuel tanks", amended on May 31, 2019, the VW Group hereby attests that, for the leak family(s) stated, the systems meet the specifications in Section VI when tested per the test procedure in section VIII.

Environmental Performance Label Information

VW Group applies new EPA label in lieu of the CA EP label.

California Emissions Warranty Statement

Please refer to California Emissions Warranty booklets located in Section 16 of the Common Section.

Adjustable Parameters/Tamper Resistance Statement

The emission control system contains no devices that contain parameters that are designed, and/or intended, to be physically capable of being adjusted

LEV IV SC03 Compliance

In accordance with California Code of Regulations Title 13 Section 1961.4 (d)(4), Volkswagen Group attests that vehicles tested using the SC03 test procedure meet the NMOG+NO_x and CO exhaust emissions requirements.

17.2 Fill Pipe Specifications

Please refer to Section 16

17.3 Evaporative Emission Deterioration Program

Please refer to Common Section Application

17.4 Assembly line NMOG / NMHC Factor

F_{NMOG}:

F_{NMOG}:

F_{NMOG}: Calculated per EPA 40CFR part 1066

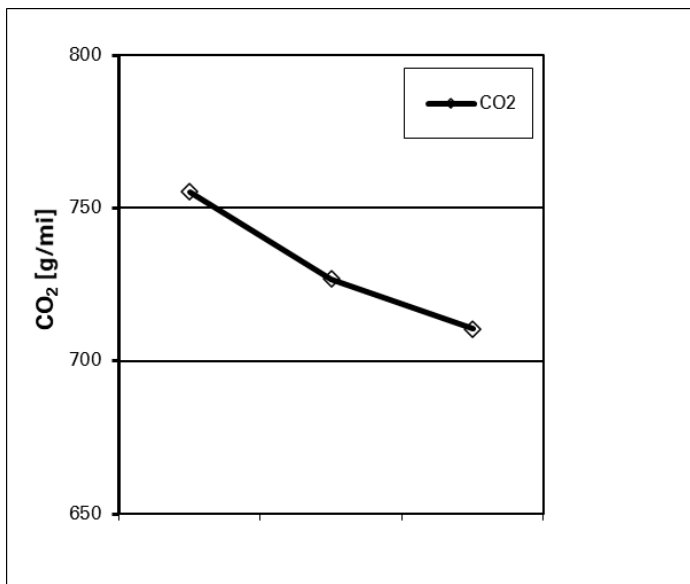
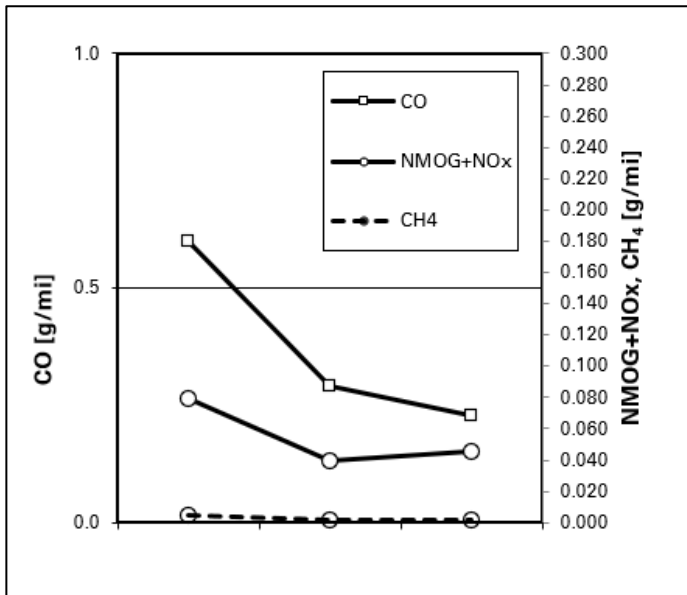
F_{HCHO} (Indolene):

F_{HCHO} (Phase II):

Compliance covered by statement according to regulations (see Section 8)

17.5 Continuity of Emissions

SQ8/Bentayga




17.6 Applicable Deterioration Factors

	THC (g/mi)	NMHC (g/mi)	NMOG (g/mi)	NOx (g/mi)	CO (g/mi)	HCHO (mg/mi)	PM (g/mi)	NMOG+NOx (g/mi)
50k	-	0.0027	0.0029	0.0004	0.11	-	0.0002	-
150k	0.0083*	0.0080	0.0088	0.0012	0.33	-	0.0006	0.0099


*120k

21 Vehicle Emission Control Information Label

SQ8

 AUDI AG VEHICLE EMISSION CONTROL INFORMATION		
Conforms to regulations: 2027 MY		
U.S. EPA: BIN125 LDT4	OBD: CA II	Fuel: Gasoline
California: ULEV125 LDT	OBD: CA II	Fuel: Gasoline
No adjustments needed.	DFI/2TC/2CAC/2TWC/2WR-HO2S/2HO2S	
Group: VVGAT04.0NAV Evap: VVGAR0182NCM	4M0.010.504.AF	

Bentayga

 BENTLEY MOTORS LIMITED	VEHICLE EMISSION CONTROL INFORMATION			
	CONFORMS TO REGULATIONS 2027 MODEL YEAR			
	U.S. EPA	Bin 125 LDT4	OBD:CAII	FUEL GASOLINE
	CALIFORNIA	ULEV 125 LDT	OBD:CAII	FUEL GASOLINE
	NO OTHER ADJUSTMENT NEEDED			
	CONTROL	DFI / 2TC / 2CAC / 2TWC / 2WR-HO2S / 2HO2S		
	GROUP	VVGAT04.0NAV	EVAP	VVGAR0155ECR

21.2 Engine Control Module (ECM) Information

Model	Engine Code	SW-Part number	Cal ID	CVN	Comments
SQ8	DWRB	4M0.906.014.F 0003	4M0014F 0003BVAB	97 1C 30 72	SOP
Bentayga	DWNG	36A906014Q	36A014Q 0002BTAB	53 11 BB AD	
Bentayga	DWRA	36A906014L	36A014L 0003BTAB	8A 68 61 70	
Bentayga EWB	DWRA	36A906014L	36A014L 0003BTAB	8A 68 61 70	

21.3 Transmission Control Module (TCM) Information

Model	Trans Code	SW-Part number	Cal ID	CVN	Comments
SQ8	AL952-8Q	4M0.927.158.ED 0001	4M0158ED00012000	52 AE 56 32	SOP
Bentayga		36A927158BH	36A158BH00022000	4F A2 22 30	
Bentayga		36A927158BF	36A158BF00012000	A2 CA E8 87	
Bentayga EWB		36A927158BF	36A158BF00012000	A2 CA E8 87	

21.4 Brake System Control Module Information

Model	Trans Code	SW-Part number	Cal ID	CVN	Comments
SQ8	AL952-8Q	4M6.907.379.BA 0915	4M6379BA0915808Q	7A 36 C3 C2	SOP
			4M6379BA0915808R	7A 35 DE F1	
		4M6.907.379.BB 0915	4M6379BB0915808Q	8F 21 A0 C0	
			4M6379BB0915808R	8F 22 BD F3	
Bentayga	DWNG / AL952-8Q	4M6907379BB	4M6379BB0915B016	C9 10 E6 2C	CeSIC brakes
Bentayga	DWNG / AL952-8Q	4M6907379BB	4M6379BB0915B017	C9 11 ED 3D	FE brakes
Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B00V	62 73 5A E6	Passive chassis, FE brakes
Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B00Y	62 7C 33 19	Passive chassis, CeSIC brakes
Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B00X	62 7D 38 08	Active chassis, FE brakes

Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B010	C9 16 DC 4A	Active chassis, CeSIC brakes
Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B00W	62 72 51 F7	S, Active chassis, FE brakes
Bentayga	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B00Z	62 7F 2E 2A	S, Active chassis, CeSIC brakes
Bentayga EWB	DWRA / AL952-8Q	4M6907379BB	4M6379BB0915B011	C9 17 D7 5B	EWB only

21.5 Gateway Control Module Information

Model	Trans Code	SW-Part number	Cal ID	CVN	Comments
SQ8	AL952-8Q	8W0.907.468.AA	GW8W0468AA0062--	9A 83 5E 5C	SOP
		80C.907.468.AA	GW80C468AA0062--	FE 12 E3 7C	
		4KE.907.468.AA	GW4KE468AA0062--	2B 05 0B 0D	
		4KL.907.468.AA	GW4KL468AA0062--	D7 10 20 9C	
		4KR.907.468.AA	GW4KR468AA0062--	EE 77 91 9C	
Bentayga	AL952-8Q	4KL907468S	GW4KL468S-0052--	D3 A0 70 0A	SOP
Bentayga	AL952-8Q	4KL907468S	GW4KL468S-0052--	D3 A0 70 0A	
Bentayga EWB	AL952-8Q	4KL907468S	GW4KL468S-0052--	D3 A0 70 0A	