

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

CARB USE ONLY

Invoice Name	MSF250900
Invoice Date	Mar 02, 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	Bently_Conti_special	Model Year 2027	VVGAV04.0EAA	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
2	Bently_Conti-FS PHEV	Model Year 2027	VVGAV04.0P7B	Light-duty vehicle test group and medium-duty vehicle test group	Base	\$ 50,309.00
3	Bently_Bentayga	Model Year 2027	VVGAT04.0PAA	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	\$ 25,155.00
4	Bently_Bentayga PHEV	Model Year 2027	VVGAT03.0NAQ	Light-duty vehicle test group and medium-duty vehicle test group	Partial Carry-Over	\$ 25,155.00

Total Due	\$ 150,928.00
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I, Tony D'Ambrosi, (Mar 2, 2026 11:55:11 EST), attest that any information provided is true, accurate, and complete.

(Responsible Party Signature Here)

Kim, Seong Hun

From: noreply@salesforce.com on behalf of California Air <mcertfees@arb.ca.gov>
Sent: Monday, April 13, 2026 11:38 AM
To: Kim, Seong Hun
Subject: [From: External] MS Fee Payment Confirmation for Invoice MSF250900
Attachments: MSF250900 - signed.pdf

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Seong Hun Kim

Attached is documentation for your MS Fee payment for Invoice Name MSF250900. 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 – 25RA0372
2. Date of Payment – 4/10/2026
3. Payment Status - Paid



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

May 4, 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 VVGAT03.0NAQ / VVGAR0155NCV based on Partial Carryover data from TVGAT03.0NAQ / TVGAR0155NCV and Executive Order numbers A-413-0387. 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
Date: 2026.05.04 10:52:07 -04'00'

Digitally signed by D'Ambrosi
Anthony VWPKI
5406C07D40F4331C
Date: 2026.05.04 10:52:07 -04'00'

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

Enclosure(s)

Running Change / Field Fix Log

Model Year: 2026

Test Group: TVGAT03.0NAQ

Models: Bentayga Hybrid

Evaporative Families: TVGAR0155NCV

RC / FF Number	Description of Change / Reason	Date
RF_VGA_R-T_078_25	Updates to climate compressor hardware and software	7/22/2025
RC_TV3.0NAQ_01_26	This change updates the BECM to improve the high voltage safety strategy.	2/20/2026
RC_T3.0NAQ-4.0PAA_003_26	Addition of modified electric motor to DMTL, resulting in a change in DMTL part number	1/13/2026

Prefix:

RC = Running Change

RF = Running Change / Field Fix

FF = Field Fix



BENTLEY

Bentley Motors Limited, a member of the Volkswagen Group

**Application for Emissions Certification
2027 Model Year**

Durability Group: VVGAHHGVNNAQ
Evap. Family: VVGAR0155NCV

Test Group: VVGAT03.0NAQ

Certificate Number: XXX

Durability Group Description: Four Stroke, Otto Cycle, Gasoline Fueled, Direct Fuel Injection, Catalyst Code: JM842

Test Group Description: 3.0l DFI/TC/2CAC/TWC/WR-HO2S/HO2S, PHEV

Battery Capacity (kWh): 18

Applicable Exhaust Standards: 50 States Federal: Tier 4 (interim) BIN 125
California: LEV IV ULEV 125

Applicable Evaporative Standards: 50 State Federal: Tier 4 FEL: 500 mg
California: LEV IV FEL: 500 mg

Carlines Covered: Bentayga Hybrid

Vehicles Tested:

VID	Config.	Test Type / #	Test Type / #
BY636040272	0	UDDS CD / RVGA10082847	50°F FTP CS / RVGA10082839
		UDDS CS / RVGA10082840	US06 CS / RVGA10082842
		HFET CD / RVGA10082848	Cold CO CS / RVGA10082843
		HFET CS / RVGA10082841	SC03 CS / RVGA10082838
BY636/2 028881	0	2-Day / MVGA10067709	ORVR / MVGA10067712
		3-Day / MVGA10067710	Running Loss / MVGA10067711

Issue Date: 5/1/2026

Questions, Contact:
EEO Office, Auburn Hills, Michigan

Table of Contents

Section 01	Correspondence and Communications
Section 02	Durability Group Description
Section 03	Evaporative/Refueling Family Description
Section 04	Durability Procedure Description
Section 05	Test Group Description
Section 06	Test Vehicle Description
Section 07	Test Results
Section 08	Emission Testing Waiver Statements
Section 09	OBD System Description
Section 10	Description of Alternate-fueled Vehicles
Section 11	AECD Description
Section 12	Description of vehicles covered by certificate and test parameters
Section 13	Projected Sales
Section 14	Request for Certificate
Section 15	Other Information
Section 16	Confidential Information
Section 17	California ARB Information

1. **Correspondence and Communication**

Please refer to the Common Section

2. Durability Group Description

Durability Source Basics	
Durability Procedure	Assigned
Durability Group Name	VVGAHHGVNNAQ
Source of Durability Data	Assigned
Relation Factor BAT VWADP / BAT SRC	Assigned
Engine Type	Piston
Combustion Method	Otto cycle four stroke
Fuel Used	Gasoline
Basic Fuel Metering System	Direct Injection
Displacement [l]	3.0

Catalyst / After treatment device specifics		
	Durability Group Statistics	Durability Data Vehicle
Catalyst Construction		Monolith
Precious Metal Composition TWC		Palladium, Rhodium
PTOX TWC		--
NAC:1 SCRC: 2		--
Total Catalyst Volume [l]		--
Total Precious Metal Loading [g]		--
Precious Metal Load Rate PM [g] / CV [l]		--
Cat. Grouping Statistic	3.1	--
Durability Group Limit (25% or 0.2 g/l)	2.3	--
Test Group Covered		VVGAT03.0NAQ

3. Evaporative / Refueling Family Description

		Bentayga Hybrid	C/O
Evaporative / Refueling Family Name		VVGAR0155NCV	MVGAR0155NCV
Vapor storage device	Canister	Yes	Yes
	Other	-	-
Basic canister design	Working Capacity (g)	155	155
	Bed Volume (cm ³)	2800	2800
	Number, config.	1	1
	Geometry	Rectangular	Rectangular
	Construction	5 Chamber	5 Chamber
	Bleeding trap	No	No
	Bleed trap Working Capacity (g)	N/A	N/A
	Material	Plastic	Plastic
Fuel System		DFI	DFI
Type of refueling system	Integrated	-	
	Non-integrated	Yes	Yes
	Other	-	-
Fill pipe seal mechanism	Liquid seal	Yes	Yes
	Mechanical Seal	-	-
	Other	-	-
Method of controlling vapor flow to the engine	Vacuum	-	-
	Purge valve	Yes	Yes
	Other	-	-
Purge control system	Valve type	Duty Cycle	Duty Cycle
	Control	ECM	ECM
Vapor hose material	4 / multi-layer hose	Yes	Yes
	Stainless Steel	-	-
	Alloy	-	-
Fuel tank material	Metal	Yes	Yes
	Plastic	-	-
	Other	-	-
Test groups combined with this Evap. family		VVGAT03.0NAQ	-

4. Durability Procedure Description

Please refer to the Common Section

5.0 Test Group Description

Evap. Family:	VVGAR0155NCV
Test Group Name:	VVGAT03.0NAQ
Certificate Number:	VVGAT03.0NAQ - XXX
Engine displacements covered:	3.0 Liters
Arrangement and number of cylinders:	V6
Vehicle class(es) covered:	LDT4
Federal Emissions Standards Class:	Tier 4 BIN 125
California Emissions Standards Class:	LEV IV ULEV 125

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:	VVGAT03.0NAQ - XXX
Models:	Bentayga Hybrid
Test Group:	VVGAT03.0NAQ
Evaporative/Refueling Family:	VVGAR0155NCV

VID	Config.	Vehicle Type	Tests Performed
BY636040272	0	EDV	UDDS CS, HFET CS, US06 CS, SC03 CS, Cold CO CS, 50°F FTP CS
BY636040272	1	FEDV	UDDS CD, UDDS CS, HFET CD, HFET CS, US06 CS, SC03 CS, Cold CO CS
BY636/2 028881	0	Evap	3-Day Evap, 2-Day Evap, Running Loss, ORVR

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	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Certificate Number	--	CARB Executive Order #	--
Certificate Issue Date	--	Certificate Revision Date	--
Certificate Effective Date	--	Conditional Certificate	--
CSI Revision #	--	CSI Submission/Revision Date	04/30/2026 04:12:07 PM
Model Year	2027		

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Group Information			
CSI Type	New	Running Change Reference Number	--
GHG Exempt Status	Not Exempt		
Drive Sources and Fuel(s)			
Drive Source #1:	Combustion Engine		
	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
	Gasoline	Spark Ignition Direct fuel injection	No
Drive Source #2:	Electric Motor		
	Fuel	Basic Fuel Metering System	Lean Burn Strategy Indicator
	Electricity	--	--
Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	No
Multiple Fuel Combustion	--	Off-board Charge Capable Indicator	Yes
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	--
Durability Group Name	VVGAHHGVNNAQ	Durability Group Equivalency Factor	1
Reduced Fee Test Group	No	Certification Region Code(s)	FA, CA
Complies with HD GHG 2b/3 regulations?	No		
Introduction into Commerce Date	--	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	Yes		
OBD Compliance Type	CARB	OBD Demonstration Vehicle Test Group	VVGAT03.0NAQ
Test Group OBD Compliance Level	Partial - with deficiencies	Number of Test Group OBD Deficiencies	1
OBD Deficiencies Comments	Bentley Bentayga V6 PHEV (VVGAT03.0NAQ): SAE J1979-2 Implementation Deficiency, ref E-26-032, communicated to CARB 25th August 2022		
Mfr Test Group Comments	--		
Mfr Exhaust / Evap Standards Comments	--		

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	04/30/2026 11:37:36 AM				
Integrated ORVR?	No	Fuel(s)	Electricity, Gasoline				
Multiple Fuel Storage	Fuels Stored Separately						
Bladder Fuel Tank?	No						
Fuel Tank Material	Metal	Fuel Tank Material Description	--				
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	0	Bleed Canister Total Working Capacity (grams)	--				
Mfr Evaporative/Refueling Family Comments	Evap system for Bentayga PHEV						
Leak Family Details							
Leak Family Indicator	Yes						
Canister Bleed Test Indicator	No	Applicability of Evaporative Canister Bleed Test	--				
Evaporative Canister Bleed Test Comments	--						
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--				
CARB Fuel Only (Rig) Test Comments	--						
Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description				
VVGAR0155NCV-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	32 - Bentayga Hybrid	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Volkswagen Group of America, Inc.	3 - Bentley	32 - Bentayga Hybrid	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Engine Description							
Hybrid Type	IC Engine/Electric Motor	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	0W30 VW50200 / VW50400				
Number of Cylinders/Rotors	6	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VVGAT03.0NAQ				Evaporative/Refueling Family			VVGAR0155NCV								
After Treatment Device(s) (ATD)																
ATD Number		ATD Type		ATD Precious Metal		Substrate Material		Substrate Construction								
1		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)		3.0			Engine Rated Horsepower			456								
Number of Inlet Valves Per Cylinder		2			Number of Exhaust Valves Per Cylinder			2								
Air Aspiration Method		Turbocharged			Number of Air Aspiration Devices			1								
Air Aspiration Device Configuration		Single			Charge Air Cooler Type			Air								
Air Aspiration Drive Method(s)		Mechanical														
Cylinder Deactivation		No														
Cylinder Deactivation Description		--														
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		2			Number of Air/Fuel Sensors			2								
Air/Fuel Sensor # 1 Type		Heated oxygen			Air/Fuel Sensor # 1 Description			--								
Air/Fuel Sensor # 2 Type		Heated oxygen			Air/Fuel Sensor # 2 Description			--								
Mfr Air/Fuel Sensor Comments		--														
Exhaust Gas Recirculation		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 DCBE + EALD var: 0														
Official Test Numbers																
Test Group		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		RVGA10082840		RVGA10082842		RVGA10082838		RVGA10082843		RVGA10082841		13.4	228.2	27.6	286.1	--
Electricity		RVGA10082840		RVGA10082842		RVGA10082838		RVGA10082843		RVGA10082841		--	--	--	--	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Official Charge Depleting Test Numbers			
Test Group Fuel	UDDS	Highway	
Electricity	RVGA10082847	RVGA10082848	
Gasoline	RVGA10082847	RVGA10082848	
Hybrid Electric Vehicle And Fuel Cell Information			
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if Other	--
Battery Type	Lithium Ion	Number of Battery Packs	1
Total Voltage of Battery Packs	374	Battery Energy Capacity	48.20
Battery Specific Energy	137.0	Battery Charger Type	Both
Number of Capacitors	--	Capacitor Rating (In Farads)	--
Mfr Capacitor Comments	--		
Hydraulic System Description	--		
Regenerative Braking Type	Electrical Regen Brake		
Regenerative Braking Source	Both	Driver Controlled Regenerative Braking	Yes
Mfr Regenerative Braking Description	--		
Drive Motor(s)/Generator(s)	1		
Motor/Generator Type 1	AC Induction	Rated Motor/Generator Power	100
Mfr Fuel Cell Description	--		
Fuel Cell On-Board H2 Storage Capacity (kg)	--	Usable H2 Fill Capacity (kg)	--
Mfr Hybrid Electric/ Electric Vehicle Comments	--		

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV									
Emission Data Vehicle Information												
Vehicle ID / Configuration	BY636/2_28881 / 0	Manufacturer Vehicle Configuration Number	0									
Original Test Group Name	MVGAT03.0NAQ	Original Evaporative/Refueling Family	MVGAR0155NCV									
Original Test Vehicle Model Year	2021											
Vehicle Model												
Represented Test Vehicle Make	BENTLEY	Represented Test Vehicle Model	Bentayga									
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> <tr> <td>2</td> <td>Electric Motor</td> <td>Electricity</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline	2	Electric Motor	Electricity
Drive Source and Fuel#	Drive Source	Fuel										
1	Combustion Engine	Gasoline										
2	Electric Motor	Electricity										
Hybrid Indicator	Yes											
Multiple Fuel Storage	--	Multiple Fuel Combustion	--									
Fuel Cell Indicator	No	Rechargeable Energy Storage System Indicator	Yes									
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--									
Off-board charge Capable Indicator	Yes											
Odometer Correction -- Initial	0	Odometer Correction Factor	1									
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor											
Odometer Correction Units	Miles											
Engine Code	DCB	Rated Horsepower	335									
Displacement (liters)	2.995											
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)	5844	Equivalent Test Weight (pounds)	6000									
GVWR (lbs)	--	N/V Ratio	23.6									
Axle Ratio	3.2											
Transmission Type	Automatic	# of Transmission Gears	8									
Transmission Lockup	Yes	Creeper Gear	No									

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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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	58.45	0.4554	0.024793	-4.496	0.28974	0.023717	19.1
Cold CO	64.295	0.50094	0.027273	-4.946	0.31871	0.026088	N/A
US06	58.45	0.4554	0.024793	-4.496	0.28974	0.023717	N/A

Emission Control Device Comments DFI/TC/2CAC/TWC/WR-HO2S/HO2S
Manufacturer Test Vehicle Comments MY 2020 BENTLEY Bentayga Hybrid tested as Bentayga SUV with Semi-Automatic 8 speed - ETW: 6000 Default test Mode: Bentley, cylinder deac. on unless noted in test comment Bentayga tested as a Bentayga 5 dr. SUV - ETW: 6000

Test #	MVGA10067709	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	MVGA10067707	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/21/2020	Fuel	Gasoline
Fuel Batch ID	IF2603	Fuel Calibration Number	2540
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4388	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	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)	0.175	--

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	0.1750	0.0030	0.178	0.500	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1750	0.0030	0.178	0.500	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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Test #	MVGA10067710	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	MVGA10067708	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/14/2020	Fuel	Gasoline
Fuel Batch ID	IF2603	Fuel Calibration Number	2540
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4370	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	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)	0.211	--

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	0.2110	0.0067	0.218	0.500	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2110	0.0067	0.218	0.500	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	MVGA10067712	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	MVGA10067707	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/27/2020	Fuel	N/A
Fuel Batch ID	IF2603	Fuel Calibration Number	2540
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	AUDI AG Neckarsulm		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4403	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC (Hydrocarbon for Running Loss and ORVR)	0.012	--

Manufacturer Test Comments --

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV									
Emission Data Vehicle Information												
Vehicle ID / Configuration	BY636040272 / 0	Manufacturer Vehicle Configuration Number	0									
Original Test Group Name	RVGAT03.0NAQ	Original Evaporative/Refueling Family	RVGAR0155NCV									
Original Test Vehicle Model Year	2024											
Vehicle Model												
Represented Test Vehicle Make	BENTLEY	Represented Test Vehicle Model	Bentayga									
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>Electric Motor</td> <td>Electricity</td> </tr> <tr> <td>2</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>				Drive Source and Fuel#	Drive Source	Fuel	1	Electric Motor	Electricity	2	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel										
1	Electric Motor	Electricity										
2	Combustion Engine	Gasoline										
Hybrid Indicator	Yes											
Multiple Fuel Storage	--	Multiple Fuel Combustion	--									
Fuel Cell Indicator	Yes	Rechargeable Energy Storage System Indicator	Yes									
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--									
Off-board charge Capable Indicator	Yes											
Odometer Correction -- Initial	0	Odometer Correction Factor	1									
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor											
Odometer Correction Units	Miles											
Engine Code	DCBE+EALD	Rated Horsepower	456									
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	All Wheel Drive									
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)									
Curb Weight (lbs)	5696	Equivalent Test Weight (pounds)	6000									
GVWR (lbs)	7165	N/V Ratio	23.1									
Axle Ratio	3.2											
Transmission Type	Automatic	# of Transmission Gears	8									
Transmission Lockup	Yes	Creeper Gear	No									

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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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	46.27	0.5289	0.02583	-3.65	0.2226	0.02611	18.3
Cold CO	50.9	0.5818	0.02841	50.9	0.5818	0.02841	N/A
US06	46.27	0.5289	0.02583	-3.65	0.2226	0.02611	N/A

Emission Control Device Comments

DFI/TC/2CAC/TWC/WR-HO2S/HO2S

Manufacturer Test Vehicle Comments

MY 2020 BENTLEY Bentayga Hybrid tested as Bentayga SUV with Semi-Automatic 8 speed - ETW: 6000 Default test Mode: Bentley, Worst case EDV mode Sport Bentayga tested as a Bentayga 5 dr. SUV - ETW:

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082839	Test Procedure	52 - Fed. fuel 50 F exh.
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/10/2023	Fuel	Gasoline
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4381	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	583.9191	--
FE BAG 1 (Bag 1 Fuel Economy)	14.7384	14.7384
CO2 BAG 2 (Bag 2 Carbon Dioxide)	552.0453	--
FE BAG 2 (Bag 2 Fuel Economy)	15.631	15.631
CO2 BAG 3 (Bag 3 Carbon Dioxide)	484.5483	--
FE BAG 3 (Bag 3 Fuel Economy)	17.7961	17.7961
METHANE (CH4 - Methane)	0.0027	--
CO (Carbon Monoxide)	0.2452	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.092	--
DT-EER (Drive Trace Energy Economy Rating)	-0.3646	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.3964	--
MFR FE (Manufacturer Fuel Economy)	16	16
NOX (Nitrogen Oxide)	0.0146	--
N2O (Nitrous Oxide)	0.0002	--
HC-NM (Non-methane Hydrocarbon)	0.0164	--
NMOG (Non-methane organic gases)	0.0181	--
PM (Particulate Matter)	0.0013	--
HC-TOTAL (Total Hydrocarbon)	0.019	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	540	--

Manufacturer Test Comments Sport mode 4k FED. FUEL 50'F FTP - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

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	0.25	--	--	--	--	--	0.2	2.1	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG	0.0181	--	1.1012	--	--	--	0.018	99.999	Pass
CA	4,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0327	--	--	--	--	--	0.033	0.250	Pass
CA	4,000 miles	California LEV-IV ULEV125	NOX	0.0146	--	--	--	--	--	0.015	99.999	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082840	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	08/15/2023	Fuel	Gasoline
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4513	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	699.3399	--
FE BAG 1 (Bag 1 Fuel Economy)	12.309	12.309
CO2 BAG 2 (Bag 2 Carbon Dioxide)	674.4363	--
FE BAG 2 (Bag 2 Fuel Economy)	12.7908	12.7908
CO2 BAG 3 (Bag 3 Carbon Dioxide)	575.8031	--
FE BAG 3 (Bag 3 Fuel Economy)	14.9721	14.9721
CO2 BAG 4 (Bag 4 Carbon Dioxide)	523.2764	--
FE BAG 4 (Bag 4 Fuel Economy)	16.4896	16.4896
METHANE (CH4 - Methane)	0.0026	--
CO (Carbon Monoxide)	0.3409	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.1319	--
DT-EER (Drive Trace Energy Economy Rating)	-0.2798	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.1192	--
MFR FE (Manufacturer Fuel Economy)	14.2	14.2
NOX (Nitrogen Oxide)	0.0172	--
N2O (Nitrous Oxide)	0.0003	--
HC-NM (Non-methane Hydrocarbon)	0.0118	--
NMOG (Non-methane organic gases)	0.013	--
PM (Particulate Matter)	0.0014	--
HC-TOTAL (Total Hydrocarbon)	0.0143	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082843	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	09/01/2023	Fuel	Gasoline
Fuel Batch ID	TC0012	Fuel Calibration Number	2
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5020	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	776.1498	--
FE BAG 1 (Bag 1 Fuel Economy)	11.0542	11.0542
CO2 BAG 2 (Bag 2 Carbon Dioxide)	751.991	--
FE BAG 2 (Bag 2 Fuel Economy)	11.4729	11.4729
CO2 BAG 3 (Bag 3 Carbon Dioxide)	604.9893	--
FE BAG 3 (Bag 3 Fuel Economy)	14.2494	14.2494
METHANE (CH4 - Methane)	0.0064	--
CO (Carbon Monoxide)	0.644	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.9992	--
DT-EER (Drive Trace Energy Economy Rating)	0.7233	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.4133	--
MFR FE (Manufacturer Fuel Economy)	12	12
NOX (Nitrogen Oxide)	0.0208	--
N2O (Nitrous Oxide)	0.0003	--
HC-NM (Non-methane Hydrocarbon)	0.052	--
NMOG (Non-methane organic gases)	0.0572	--
HC-TOTAL (Total Hydrocarbon)	0.0582	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	717	--

Certification Summary Information Report

Test Group		VVGAT03.0NAQ			Evaporative/Refueling Family				VVGAR0155NCV			
Manufacturer Test Comments		Sport mode 4k Cold-CO - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:										
Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	RAF	NMOG/NM HC Ratio	Diesel Adjustment Factor	Add DF	Mult DF	Certification Level	Standard	Pass/Fail
Fed	50,000 miles	Federal Tier 3 Bin 125	CO	0.64	--	--	--	0.3800	--	1.0	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	HC-NM	0.05	--	--	--	0.0149	--	0.1	0.5	Pass
CA	50,000 miles	California LEV-IV ULEV125	CO	0.64	--	--	--	0.3800	--	1.0	12.5	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10083267	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	11/02/2023	Fuel	Gasoline
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5166	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
Test Results			

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
	Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
	CO2 BAG 1 (Bag 1 Carbon Dioxide)	471.6118	--
	FE BAG 1 (Bag 1 Fuel Economy)	18.8362	18.8362
	CO2 BAG 2 (Bag 2 Carbon Dioxide)	315.0898	--
	FE BAG 2 (Bag 2 Fuel Economy)	28.3084	28.3084
	CO2 BAG 3 (Bag 3 Carbon Dioxide)	412.5667	--
	FE BAG 3 (Bag 3 Fuel Economy)	21.5785	21.5785
	CO2 BAG 4 (Bag 4 Carbon Dioxide)	300.3957	--
	FE BAG 4 (Bag 4 Fuel Economy)	29.67	29.67
	METHANE (CH4 - Methane)	0.0029	--
	CO (Carbon Monoxide)	0.4521	--
	DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.3506	--
	DT-EER (Drive Trace Energy Economy Rating)	-1.0582	--
	DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.1765	--
	MFR FE (Manufacturer Fuel Economy)	24.1	24.1
	NOX (Nitrogen Oxide)	0.0126	--
	N2O (Nitrous Oxide)	0.0005	--
	HC-NM (Non-methane Hydrocarbon)	0.0172	--
	NMOG (Non-methane organic gases)	0.0177	--
	PM (Particulate Matter)	0.0014	--
	HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0298	--
	HC-TOTAL (Total Hydrocarbon)	0.02	--
	Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
	Carbon-Related Exhaust Emissions	371	371
	Test Result Name	Unrounded Test Result	Verify Calculated CO2
	Carbon dioxide	370	--
Manufacturer Test Comments	Bentley Mode 4k FED. FUEL FTP - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:		

Certification Summary Information Report

Test Group		VVGAT03.0NAQ				Evaporative/Refueling Family				VVGAR0155NCV		
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	371	--	--	--	0.6400	--	372	--	--
Fed	120,000 miles	Federal Tier 3 Bin 125	METHANE	0.0029	--	--	--	0.0069	--	0.010	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 125	N2O	0.0005	--	--	--	0.0028	--	0.003	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	CO	0.45	--	--	--	0.3800	--	0.8	2.1	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0177	--	1.1012	--	0.0149	--	0.033	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0303	--	--	--	--	--	0.057	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0126	--	--	--	0.0115	--	0.024	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0014	--	--	--	0.0000	--	0.001	0.003	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.45	--	--	--	0.3800	--	0.8	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0177	--	1.1012	--	0.0149	--	0.033	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0303	--	--	--	--	--	0.057	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0126	--	--	--	0.0115	--	0.024	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0014	--	--	--	0.0000	--	0.001	0.003	Pass

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

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082841	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	08/15/2023	Fuel	Gasoline
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4528	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0011	--
CO (Carbon Monoxide)	0.0917	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.6206	--
DT-EER (Drive Trace Energy Economy Rating)	0.1341	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.9033	--
MFR FE (Manufacturer Fuel Economy)	27.6	27.6
NOX (Nitrogen Oxide)	0.0027	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0006	--
NMOG (Non-methane organic gases)	0.0006	--
PM (Particulate Matter)	0.0001	--
HC-TOTAL (Total Hydrocarbon)	0.0017	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	312	999
Optional Carbon-Related Exhaust Emissions	312	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	312	--

Manufacturer Test Comments

Sport mode 4k HWFET - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

Certification Summary Information Report

Test Group		VVGAT03.0NAQ				Evaporative/Refueling Family				VVGAR0155NCV		
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	--	--	--	0.6400	--	1000	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0006	--	1.0300	--	0.0149	--	0.016	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0033	--	--	--	--	--	0.030	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0027	--	--	--	0.0115	--	0.014	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0006	--	1.0300	--	0.0149	--	0.016	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.00330	--	--	--	--	--	0.030	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.00270	--	--	--	0.0115	--	0.0142	99.9990	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	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10083268	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	11/02/2023	Fuel	Gasoline
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5182	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0015	--
CO (Carbon Monoxide)	0.288	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	3.4242	--
DT-EER (Drive Trace Energy Economy Rating)	-0.3668	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	4.1254	--
MFR FE (Manufacturer Fuel Economy)	31.6	31.6
NOX (Nitrogen Oxide)	0.0018	--
N2O (Nitrous Oxide)	0.0001	--
HC-NM (Non-methane Hydrocarbon)	0.0028	--
NMOG (Non-methane organic gases)	0.0029	--
PM (Particulate Matter)	0.0007	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0046	--
HC-TOTAL (Total Hydrocarbon)	0.0043	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	282	282

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	282	--

Manufacturer Test Comments Bentley Mode 4k HWFET - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

Certification Summary Information Report

Test Group		VVGAT03.0NAQ				Evaporative/Refueling Family				VVGAR0155NCV		
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	282	--	--	--	0.6400	--	283	--	--
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0029	--	1.0300	--	0.0149	--	0.018	99.000	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG+NOX	0.0047	--	--	--	--	--	0.031	0.125	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0018	--	--	--	0.0115	--	0.013	99.000	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0029	--	1.0300	--	0.0149	--	0.018	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.00470	--	--	--	--	--	0.031	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.00180	--	--	--	0.0115	--	0.0133	99.9990	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	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082842	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	08/15/2023	Fuel	Gasoline
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4551	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
CO2 BAG 1 (Bag 1 Carbon Dioxide)	698.5154	--
FE BAG 1 (Bag 1 Fuel Economy)	12.3164	12.3164
CO2 BAG 2 (Bag 2 Carbon Dioxide)	381.9305	--
FE BAG 2 (Bag 2 Fuel Economy)	22.543	22.543
METHANE (CH4 - Methane)	0.0098	--
CO (Carbon Monoxide)	0.6823	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.7738	--
DT-EER (Drive Trace Energy Economy Rating)	-1.7229	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-3.0177	--
MFR FE (Manufacturer Fuel Economy)	19	19
NOX (Nitrogen Oxide)	0.0084	--
N2O (Nitrous Oxide)	0.0002	--
HC-NM (Non-methane Hydrocarbon)	0.016	--
NMOG (Non-methane organic gases)	0.0165	--
PM (Particulate Matter)	0.0011	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0244	--
HC-TOTAL (Total Hydrocarbon)	0.0257	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	452	--

Manufacturer Test Comments Sport mode 4k US06 - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

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	--	--	--	0.3800	--	1.1	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0165	--	1.0300	--	0.0149	--	0.031	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0084	--	--	--	0.0115	--	0.020	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	PM	0.0011	--	--	--	0.0000	--	0.001	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.68	--	--	--	0.3800	--	1.1	9.6	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0165	--	1.0300	--	0.0149	--	0.031	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0249	--	--	--	--	--	0.051	0.150	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0084	--	--	--	0.0115	--	0.020	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	PM	0.0011	--	--	--	0.0000	--	0.001	0.006	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082838	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	08/08/2023	Fuel	Gasoline
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Vehicle Class	LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4366	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	No		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0006	--
CO (Carbon Monoxide)	0.2292	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.8456	--
DT-EER (Drive Trace Energy Economy Rating)	-0.0714	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.1462	--
MFR FE (Manufacturer Fuel Economy)	12.8	12.8
NOX (Nitrogen Oxide)	0.0104	--
N2O (Nitrous Oxide)	0.0001	--
HC-NM (Non-methane Hydrocarbon)	0.0012	--
NMOG (Non-methane organic gases)	0.0012	--
PM (Particulate Matter)	0.0012	--
HC-NM+NOX (SFTP Non-methane Hydrocarbon + Nitrogen Oxides for US06 or SC03)	0.0116	--
HC-TOTAL (Total Hydrocarbon)	0.0017	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	674	--

Manufacturer Test Comments

Sport mode 4k SC03 - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

Certification Summary Information Report

Test Group		VVGAT03.0NAQ				Evaporative/Refueling Family				VVGAR0155NCV		
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	--	--	--	0.3800	--	0.6	99.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NMOG	0.0012	--	1.0300	--	0.0149	--	0.016	99.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 125	NOX	0.0104	--	--	--	0.0115	--	0.022	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	CO	0.23	--	--	--	0.3800	--	0.6	2.1	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG	0.0012	--	1.0300	--	0.014	--	0.015	99.999	Pass
CA	150,000 miles	California LEV-IV ULEV125	NMOG+NOX	0.0116	--	--	--	--	--	0.037	0.125	Pass
CA	150,000 miles	California LEV-IV ULEV125	NOX	0.0104	--	--	--	0.011	--	0.021	99.999	Pass

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10083265	Test Procedure	81 - Charge Depleting UDDS
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	11/03/2023	Fuel	N/A
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5205	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
PHEV/EV Charge Depleting Test Information			
Recharge Event Voltage	239	Recharge Event Energy (kiloWatt-hours)	17.7
Charge Depleting Range (Calculated miles)	37.25	Charge Depleting Range (Actual miles)	32.57
Charge Depleting Range Highway (Calculated miles)	--	Derived 5-Cycle Coefficient Model Year	2017
All Electric Range Unadjusted (miles)	31.31	Equivalent All Electric Range (miles)	34.35
Number of Charge Depleting Bags/Phases Conducted	7	Transition Bag/Phase Number	5
Charge Depleting Bag/Phase #1			

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.43		
Average System Voltage	411.8		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.47		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.76		
Drive Trace Energy Economy Rating	-1.682		
Drive Trace Inertia Work Ratio Rating	-0.785		
Integrated Amp-hours	8.41		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	82.5		
System Start State of Charge Watt-hours	100		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.45		
Average System Voltage	392.24		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.35		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.01		
Drive Trace Energy Economy Rating	-1.164		
Drive Trace Inertia Work Ratio Rating	0.481		
Integrated Amp-hours	16.73		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	65.2		
System Start State of Charge Watt-hours	82.5		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	376.6		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.26		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-1.07		
Drive Trace Energy Economy Rating	-2.096		
Drive Trace Inertia Work Ratio Rating	-1.781		
Integrated Amp-hours	25.33		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	47.2		
System Start State of Charge Watt-hours	65.1		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	368.56		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.12		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.7		
Drive Trace Energy Economy Rating	-2.157		
Drive Trace Inertia Work Ratio Rating	-0.89		
Integrated Amp-hours	34.13		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	28.9		
System Start State of Charge Watt-hours	47.2		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.43		
Average System Voltage	364.62		
CH4 - Methane	0.01		
Carbon Monoxide	0.43		
Carbon dioxide	246.9		
Carbon-Related Exhaust Emissions	248		
Drive Trace Absolute Speed Change Rating	-0.3		
Drive Trace Energy Economy Rating	-1.118		
Drive Trace Inertia Work Ratio Rating	-0.126		
Integrated Amp-hours	37.45		
Manufacturer Fuel Economy	36.02		
Nitrogen Oxide	0.02		
Non-methane Hydrocarbon	0.03		
Non-methane organic gases	0.030906		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	22		
System Start State of Charge Watt-hours	28.9		
Total Hydrocarbon	0.03		

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	365.94		
CH4 - Methane	0		
Carbon Monoxide	0.3		
Carbon dioxide	347.19		
Carbon-Related Exhaust Emissions	348		
Drive Trace Absolute Speed Change Rating	-0.27		
Drive Trace Energy Economy Rating	-1.048		
Drive Trace Inertia Work Ratio Rating	-0.297		
Integrated Amp-hours	37.54		
Manufacturer Fuel Economy	25.66		
Nitrogen Oxide	0.01		
Non-methane Hydrocarbon	0.03		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	21.8		
System Start State of Charge Watt-hours	21.8		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #7

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	365.46		
CH4 - Methane	0		
Carbon Monoxide	0.47		
Carbon dioxide	354.56		
Carbon-Related Exhaust Emissions	355		
Drive Trace Absolute Speed Change Rating	-0.21		
Drive Trace Energy Economy Rating	-1.004		
Drive Trace Inertia Work Ratio Rating	0.098		
Integrated Amp-hours	37.44		
Manufacturer Fuel Economy	25.11		
Nitrogen Oxide	0.01		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	22		
System Start State of Charge Watt-hours	21.6		
Total Hydrocarbon	0.01		

Manufacturer Test Comments

Bentley Mode 4k HWFET - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10083266	Test Procedure	84 - Charge Depleting Highway
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	11/04/2023	Fuel	N/A
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	5258	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
PHEV/EV Charge Depleting Test Information			
Recharge Event Voltage	237.2	Recharge Event Energy (kiloWatt-hours)	16.8
Charge Depleting Range (Calculated miles)	51.28	Charge Depleting Range (Actual miles)	40.51
Charge Depleting Range Highway (Calculated miles)	--	Derived 5-Cycle Coefficient Model Year	2017
All Electric Range Unadjusted (miles)	35.6	Equivalent All Electric Range (miles)	44.46
Number of Charge Depleting Bags/Phases Conducted	7	Transition Bag/Phase Number	5
Charge Depleting Bag/Phase #1			

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.26		
Average System Voltage	405.15		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.06		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-6.09		
Drive Trace Energy Economy Rating	-0.814		
Drive Trace Inertia Work Ratio Rating	-7.509		
Integrated Amp-hours	10.78		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	77.5		
System Start State of Charge Watt-hours	100		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.28		
Average System Voltage	381.7		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.06		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-1.79		
Drive Trace Energy Economy Rating	-0.675		
Drive Trace Inertia Work Ratio Rating	-2.205		
Integrated Amp-hours	21.26		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	55.7		
System Start State of Charge Watt-hours	77.5		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.28		
Average System Voltage	366.3		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.06		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.29		
Drive Trace Energy Economy Rating	-0.205		
Drive Trace Inertia Work Ratio Rating	0.152		
Integrated Amp-hours	32.06		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	33.2		
System Start State of Charge Watt-hours	55.7		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.26		
Average System Voltage	360.71		
CH4 - Methane	0		
Carbon Monoxide	0.25		
Carbon dioxide	154.78		
Carbon-Related Exhaust Emissions	155		
Drive Trace Absolute Speed Change Rating	-5.53		
Drive Trace Energy Economy Rating	-0.73		
Drive Trace Inertia Work Ratio Rating	-6.707		
Integrated Amp-hours	37.61		
Manufacturer Fuel Economy	57.47		
Nitrogen Oxide	0.01		
Non-methane Hydrocarbon	0.02		
Non-methane organic gases	0.0206		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	21.6		
System Start State of Charge Watt-hours	21.6		
Total Hydrocarbon	0.02		

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.26		
Average System Voltage	365.98		
CH4 - Methane	0		
Carbon Monoxide	0.19		
Carbon dioxide	294.54		
Carbon-Related Exhaust Emissions	295		
Drive Trace Absolute Speed Change Rating	-0.68		
Drive Trace Energy Economy Rating	-0.663		
Drive Trace Inertia Work Ratio Rating	-0.724		
Integrated Amp-hours	37.4		
Manufacturer Fuel Economy	30.26		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	22.1		
System Start State of Charge Watt-hours	21.4		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.27		
Average System Voltage	366.33		
CH4 - Methane	0		
Carbon Monoxide	0.23		
Carbon dioxide	283.81		
Carbon-Related Exhaust Emissions	284		
Drive Trace Absolute Speed Change Rating	-1.52		
Drive Trace Energy Economy Rating	-0.366		
Drive Trace Inertia Work Ratio Rating	-1.52		
Integrated Amp-hours	37.28		
Manufacturer Fuel Economy	31.4		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	22.3		
System Start State of Charge Watt-hours	22.1		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #7

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.26		
Average System Voltage	366.04		
CH4 - Methane	0		
Carbon Monoxide	0.27		
Carbon dioxide	281.11		
Carbon-Related Exhaust Emissions	282		
Drive Trace Absolute Speed Change Rating	-1.64		
Drive Trace Energy Economy Rating	-0.682		
Drive Trace Inertia Work Ratio Rating	-1.655		
Integrated Amp-hours	37.33		
Manufacturer Fuel Economy	31.69		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0.01		
Non-methane organic gases	0.0103		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	22.2		
System Start State of Charge Watt-hours	22.3		
Total Hydrocarbon	0.01		

Manufacturer Test Comments

Bentley Mode 4k HWFET - Tested as BENTLEY Bentayga SUV 5 dr. EDV - ETW:

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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Emission Data Vehicle Information

Vehicle ID / Configuration	BY636040272 / 1	Manufacturer Vehicle Configuration Number	1
Original Test Group Name	RVGAT03.0NAQ	Original Evaporative/Refueling Family	RVGAR0155NCV
Original Test Vehicle Model Year	2024		

Vehicle Model

Represented Test Vehicle Make	BENTLEY	Represented Test Vehicle Model	Bentayga
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Leak Family Details

Leak Family Identifier	--	Leak Family Name	--
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Drive Sources and Fuel System Details

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

Hybrid Indicator	Yes		
Multiple Fuel Storage	--	Multiple Fuel Combustion	--
Fuel Cell Indicator	Yes	Rechargeable Energy Storage System Indicator	Yes
Rechargeable Energy Storage System	Battery(s)	Rechargeable Energy Storage System, if 'Other'	--
Off-board charge Capable Indicator	Yes		
Odometer Correction -- Initial	0	Odometer Correction Factor	1
Odometer Correction Sign	- = System Miles is equal to (Test odometer reading - Initial system miles) * Correction factor		
Odometer Correction Units	Miles		
Engine Code	DCBE+EALD	Rated Horsepower	456
Displacement (liters)	3	Air Aspiration Method, if 'Other'	
Air Aspiration Method	Turbocharged	Air Aspiration Device Configuration	Single
Number of Air Aspiration Devices	1	Drive Mode While Testing	All Wheel Drive
Charge Air Cooler Type	Air	Aged Emission Components	4,000 (mi)
Shift Indicator Light Usage	Not equipped	Equivalent Test Weight (pounds)	6000
Curb Weight (lbs)	5696	N/V Ratio	23.1
GVWR (lbs)	7165		
Axle Ratio	3.2		
Transmission Type	Automatic	# of Transmission Gears	8
Transmission Lockup	Yes	Creeper Gear	No

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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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	46.27	0.5289	0.02502	-2.55	0.1614	0.02583	18
Cold CO	50.9	0.5818	0.02752	50.9	0.5818	0.02752	N/A
US06	46.27	0.5289	0.02502	-2.55	0.1614	0.02583	N/A

Emission Control Device Comments

DFI/TC/2CAC/TWC/WR-HO2S/HO2S

Manufacturer Test Vehicle Comments

MY 2020 BENTLEY Bentayga Hybrid tested as Bentayga SUV with Semi-Automatic 8 speed - ETW: 6000 Default test Mode: Bentley Bentayga tested as a Bentayga 5 dr. SUV - ETW:

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082847	Test Procedure	81 - Charge Depleting UDDS
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/25/2023	Fuel	N/A
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4801	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
PHEV/EV Charge Depleting Test Information			
Recharge Event Voltage	242	Recharge Event Energy (kiloWatt-hours)	17.4
Charge Depleting Range (Calculated miles)	44.7	Charge Depleting Range (Actual miles)	36.76
Charge Depleting Range Highway (Calculated miles)	--	Derived 5-Cycle Coefficient Model Year	2017
All Electric Range Unadjusted (miles)	33.73	Equivalent All Electric Range (miles)	39.33
Number of Charge Depleting Bags/Phases Conducted	7	Transition Bag/Phase Number	5
Charge Depleting Bag/Phase #1			

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	411.96		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.63		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-2.11		
Drive Trace Energy Economy Rating	-2.133		
Drive Trace Inertia Work Ratio Rating	-3.52		
Integrated Amp-hours	8.37		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	8.37		
System Start State of Charge Watt-hours	0		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.47		
Average System Voltage	393.22		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.46		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-1.77		
Drive Trace Energy Economy Rating	-2.166		
Drive Trace Inertia Work Ratio Rating	-2.663		
Integrated Amp-hours	16.44		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	16.44		
System Start State of Charge Watt-hours	8.37		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.45		
Average System Voltage	377.16		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.37		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.94		
Drive Trace Energy Economy Rating	-1.828		
Drive Trace Inertia Work Ratio Rating	-1.333		
Integrated Amp-hours	24.84		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	24.84		
System Start State of Charge Watt-hours	16.44		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.44		
Average System Voltage	368.54		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.12		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-0.39		
Drive Trace Energy Economy Rating	-1.585		
Drive Trace Inertia Work Ratio Rating	-0.476		
Integrated Amp-hours	33.36		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	33.36		
System Start State of Charge Watt-hours	24.84		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.43		
Average System Voltage	361.8		
CH4 - Methane	0		
Carbon Monoxide	0.24		
Carbon dioxide	157.56		
Carbon-Related Exhaust Emissions	158		
Drive Trace Absolute Speed Change Rating	0.03		
Drive Trace Energy Economy Rating	-0.955		
Drive Trace Inertia Work Ratio Rating	0.262		
Integrated Amp-hours	39.01		
Manufacturer Fuel Economy	56.45		
Nitrogen Oxide	0.02		
Non-methane Hydrocarbon	0.03		
Non-methane organic gases	0.03		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	39.01		
System Start State of Charge Watt-hours	33.36		
Total Hydrocarbon	0.03		

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.45		
Average System Voltage	374		
CH4 - Methane	0		
Carbon Monoxide	0.49		
Carbon dioxide	351.99		
Carbon-Related Exhaust Emissions	353		
Drive Trace Absolute Speed Change Rating	-0.6		
Drive Trace Energy Economy Rating	-0.952		
Drive Trace Inertia Work Ratio Rating	-0.581		
Integrated Amp-hours	39.01		
Manufacturer Fuel Economy	25.29		
Nitrogen Oxide	0.01		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	38.74		
System Start State of Charge Watt-hours	39.01		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #7

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	7.47		
Average System Voltage	363.94		
CH4 - Methane	0		
Carbon Monoxide	0.58		
Carbon dioxide	336.79		
Carbon-Related Exhaust Emissions	338		
Drive Trace Absolute Speed Change Rating	-0.14		
Drive Trace Energy Economy Rating	-1.343		
Drive Trace Inertia Work Ratio Rating	-0.079		
Integrated Amp-hours	38.81		
Manufacturer Fuel Economy	26.42		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	38.81		
System Start State of Charge Watt-hours	38.74		
Total Hydrocarbon	0.01		
Manufacturer Test Comments	Bentley mode Charge Depleting UDDS - Tested as BENTLEY Bentayga SUV 5 dr. FEDV - ETW:		

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test #	RVGA10082848	Test Procedure	84 - Charge Depleting Highway
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	08/26/2023	Fuel	N/A
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Vehicle Class	N/A	DF Type	EPA Assigned
Verify Test Lab ID	Volkswagen Test Center Oxnard		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4857	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	Yes		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes
PHEV/EV Charge Depleting Test Information			
Recharge Event Voltage	238.8	Recharge Event Energy (kiloWatt-hours)	17.1
Charge Depleting Range (Calculated miles)	51.28	Charge Depleting Range (Actual miles)	40.29
Charge Depleting Range Highway (Calculated miles)	--	Derived 5-Cycle Coefficient Model Year	2017
All Electric Range Unadjusted (miles)	38.1	Equivalent All Electric Range (miles)	44.97
Number of Charge Depleting Bags/Phases Conducted	7	Transition Bag/Phase Number	4
Charge Depleting Bag/Phase #1			

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.27		
Average System Voltage	405.78		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.06		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-3.09		
Drive Trace Energy Economy Rating	-0.489		
Drive Trace Inertia Work Ratio Rating	-3.854		
Integrated Amp-hours	10.38		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	10.38		
System Start State of Charge Watt-hours	0		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #2

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.25		
Average System Voltage	383.16		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.07		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-3.48		
Drive Trace Energy Economy Rating	-0.826		
Drive Trace Inertia Work Ratio Rating	-4.235		
Integrated Amp-hours	20.37		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	20.37		
System Start State of Charge Watt-hours	10.38		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #3

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.26		
Average System Voltage	367.89		
CH4 - Methane	0		
Carbon Monoxide	0		
Carbon dioxide	0.08		
Carbon-Related Exhaust Emissions	0		
Drive Trace Absolute Speed Change Rating	-5.6		
Drive Trace Energy Economy Rating	-0.611		
Drive Trace Inertia Work Ratio Rating	-6.822		
Integrated Amp-hours	30.67		
Manufacturer Fuel Economy	0		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	30.67		
System Start State of Charge Watt-hours	20.37		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #4

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.27		
Average System Voltage	358.18		
CH4 - Methane	0		
Carbon Monoxide	0.23		
Carbon dioxide	76.81		
Carbon-Related Exhaust Emissions	77		
Drive Trace Absolute Speed Change Rating	-3.86		
Drive Trace Energy Economy Rating	-0.451		
Drive Trace Inertia Work Ratio Rating	-4.52		
Integrated Amp-hours	39		
Manufacturer Fuel Economy	115.5		
Nitrogen Oxide	0.01		
Non-methane Hydrocarbon	0.02		
Non-methane organic gases	0.02		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	39		
System Start State of Charge Watt-hours	30.67		
Total Hydrocarbon	0.02		

Charge Depleting Bag/Phase #5

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.27		
Average System Voltage	363.79		
CH4 - Methane	0		
Carbon Monoxide	0.27		
Carbon dioxide	302.38		
Carbon-Related Exhaust Emissions	302		
Drive Trace Absolute Speed Change Rating	-1.41		
Drive Trace Energy Economy Rating	-0.172		
Drive Trace Inertia Work Ratio Rating	-1.538		
Integrated Amp-hours	38.47		
Manufacturer Fuel Economy	29.46		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	38.47		
System Start State of Charge Watt-hours	39		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #6

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.28		
Average System Voltage	364.07		
CH4 - Methane	0		
Carbon Monoxide	0.21		
Carbon dioxide	273.71		
Carbon-Related Exhaust Emissions	274		
Drive Trace Absolute Speed Change Rating	-1.8		
Drive Trace Energy Economy Rating	-0.502		
Drive Trace Inertia Work Ratio Rating	-1.965		
Integrated Amp-hours	38.33		
Manufacturer Fuel Economy	32.56		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	38.33		
System Start State of Charge Watt-hours	38.47		
Total Hydrocarbon	0		

Charge Depleting Bag/Phase #7

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Test Result/Emission Name	Unrounded Test Result		
Actual Distance Driven (miles)	10.28		
Average System Voltage	364.42		
CH4 - Methane	0		
Carbon Monoxide	0.23		
Carbon dioxide	272.95		
Carbon-Related Exhaust Emissions	273		
Drive Trace Absolute Speed Change Rating	-1.79		
Drive Trace Energy Economy Rating	-0.132		
Drive Trace Inertia Work Ratio Rating	-2.038		
Integrated Amp-hours	38.19		
Manufacturer Fuel Economy	32.64		
Nitrogen Oxide	0		
Non-methane Hydrocarbon	0		
Non-methane organic gases	0		
Non-methane organic gases plus Nitrogen Oxides	999.999		
System End State of Charge Watt-hours	38.19		
System Start State of Charge Watt-hours	38.33		
Total Hydrocarbon	0.01		
Manufacturer Test Comments	Bentley mode Charge Depleting HWY - Tested as BENTLEY Bentayga SUV 5 dr. FEDV - ETW:		

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Fuel Properties			
Fuel Batch ID	IF2603	Fuel Calibration Number	2540
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	06/29/2020
Fuel Batch Calibration Effective Date	07/27/2020	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)	17642
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	--
Fuel Batch ID	TC0012	Fuel Calibration Number	2
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	10/29/2020
Fuel Batch Calibration Effective Date	08/10/2023	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	0.742
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17943
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.826	Weight Fraction CO2	--
Fuel Batch ID	TC0019	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	08/24/2021
Fuel Batch Calibration Effective Date	08/24/2021	Fuel Batch Calibration Ineffective Date	08/24/2022
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.748
Fuel Ethanol Volume Percent (%)	10	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18000
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.825	Weight Fraction CO2	--
Fuel Batch ID	TC0033	Fuel Calibration Number	1
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	07/06/2023
Fuel Batch Calibration Effective Date	07/06/2023	Fuel Batch Calibration Ineffective Date	--
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18425
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.867	Weight Fraction CO2	--

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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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	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	--	--	--	--	--	--	0.6400	999
120,000 miles	METHANE	--	--	--	--	--	--	0.0069	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0028	0.010
150,000 miles	CO	--	--	--	--	--	--	0.3800	2.1
150,000 miles	CO-COMP	--	--	--	--	--	--	--	4.2
150,000 miles	NMOG	--	--	1.1012	--	--	--	0.0149	99.000
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125
150,000 miles	NMOG+NOX-COMP	--	--	--	--	--	--	--	0.110
150,000 miles	NOX	--	--	--	--	--	--	0.0115	99.000
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003

Cert Region		Federal	Cert/In-Use Code		Both				
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)	Standard Level		Federal Tier 3 Bin 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	--	--	--	--	--	--	0.3800	99.9
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0149	99.999
150,000 miles	NOX	--	--	--	--	--	--	0.0115	99.999
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.006

Certification Summary Information Report

Test Group		VVGAT03.0NAQ			Evaporative/Refueling Family			VVGAR0155NCV		
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	--	--	--	--	--	--	0.3800	2.1	
150,000 miles	NMOG	--	--	1.1012	--	--	--	0.0149	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0115	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.003	

Cert Region		Federal			Cert/In-Use Code			Both		
Vehicle Class		LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 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	--	--	--	--	--	--	0.3800	99.9	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0149	99.999	
150,000 miles	NOX	--	--	--	--	--	--	0.0115	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			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	--	--	--	--	--	--	0.3800	2.1	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.014	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.011	99.999	

Certification Summary Information Report

Test Group		VVGAT03.0NAQ			Evaporative/Refueling Family			VVGAR0155NCV		
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	--	--	--	--	--	--	0.3800	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0.0149	0.5	
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			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	--	--	1.1012	--	--	--	--	99.999	
4,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.250	
4,000 miles	NOX	--	--	--	--	--	--	--	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	--	--	--	--	--	--	0.3800	9.6	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0149	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.150	
150,000 miles	NOX	--	--	--	--	--	--	0.0115	99.999	
150,000 miles	PM	--	--	--	--	--	--	0.0000	0.006	

Certification Summary Information Report

Test Group		VVGAT03.0NAQ			Evaporative/Refueling Family			VVGAR0155NCV		
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	--	--	--	0.0149	99.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0115	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			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	--	--	--	--	--	--	0.6400	999	
150,000 miles	NMOG	--	--	1.0300	--	--	--	0.0149	99.000	
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.125	
150,000 miles	NOX	--	--	--	--	--	--	0.0115	99.000	

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	--	--	--	--	--	--	0.3800	12.5	

Evaporative/Refueling Standards									

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV		
Evaporative/Refueling Family	VVGAR0155NCV	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	--	0.05	0.000
Evaporative/Refueling Family	VVGAR0155NCV	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	Federal fuel refueling test (ORVR)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.20	0.005
Evaporative/Refueling Family	VVGAR0155NCV	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	Federal fuel 3-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0067
Evaporative/Refueling Family	VVGAR0155NCV	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	--	0.500	0.0030
Evaporative/Refueling Family	VVGAR0155NCV	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	--	0.500	0.0067

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV		
Evaporative/Refueling Family	VVGAR0155NCV	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.500	0.0030
Evaporative/Refueling Family	VVGAR0155NCV	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-TOTAL-EQUIV	--	0.20	0.005
Evaporative/Refueling Family	VVGAR0155NCV	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

Certification Summary Information Report

Test Group	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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		VVGAT03.0NAQ	Evaporative/Refueling Family		VVGAR0155NCV
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		VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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	VVGAT03.0NAQ	Evaporative/Refueling Family	VVGAR0155NCV
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, and
- (B) to facilitate that 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 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	VVGAHHGVNNAQ
Test Group	VVGAT03.0NAQ
Evap Family	VVGAR0155NCV
Emission Control System:	DFI/TC/2CAC/TWC/WR-HO2S/HO2S

Engine Displacement:	3.0 liter
Valves per Cylinder:	4
Sales Area:	50 states
MMS:	MG1CS002
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	Com - pression ratio	Idle [rpm]											
DCBE + EALD	Bentayga Hybrid	LDT 4	JM842 (PRE) JM842 (MAIN)	11.2	630±100	456 @ 5300 - 6400	516 lb-ft @1440	8	6000	5696	7165	19.8	155	285/45 R21 or 285/40 R22	23.1 23.2	Y

*1Nm = 0.737561 lbf×ft

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
AL552E-8Q	AWD	8	1-8	760/6400	3.2	4.714	3.143	2.106	1.667	1.285	1	0.839	0.667

12.2 Test conditions

Model	ETW	Road Track Coefficients						TRL50	TCDT	Fan Pos.	Drive Mode for Testing	Shift Sched. I.D.	J1711 Version Used: (applicable to PHEV only)
		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]				
Bentayga Hybrid	6000	46.27	0.5289	0.02583	205.82	1.4620	0.04436	18.3	20.5	20	FEDV = Bentley / EDV = Sport	automatic	201006
Bentayga Hybrid	6000	46.27	0.5289	0.02502	205.82	1.4620	0.04297	18.0	20.8	20	FEDV = Bentley	automatic	201006

Vehicle Starting procedure:

Turning on the ignition by pressing the "Stop/Start" button.

The vehicle will show "READY" in the instrument cluster.

To get the vehicle into READY the doors must be closed and the seatbelts have to be buckled in.

By pressing the brake pedal and pressing the "Stop/Start" button the car will switch into "READY".

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. Automatic headlights can be turned off via the infotainment / MMI screen.

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.

SAE Tested Version:

Vehicles in this test group were tested according to SAE J1711 201006

Climate Control Settings used for testing:

AC set to MAX

12.3 e-Motor Details

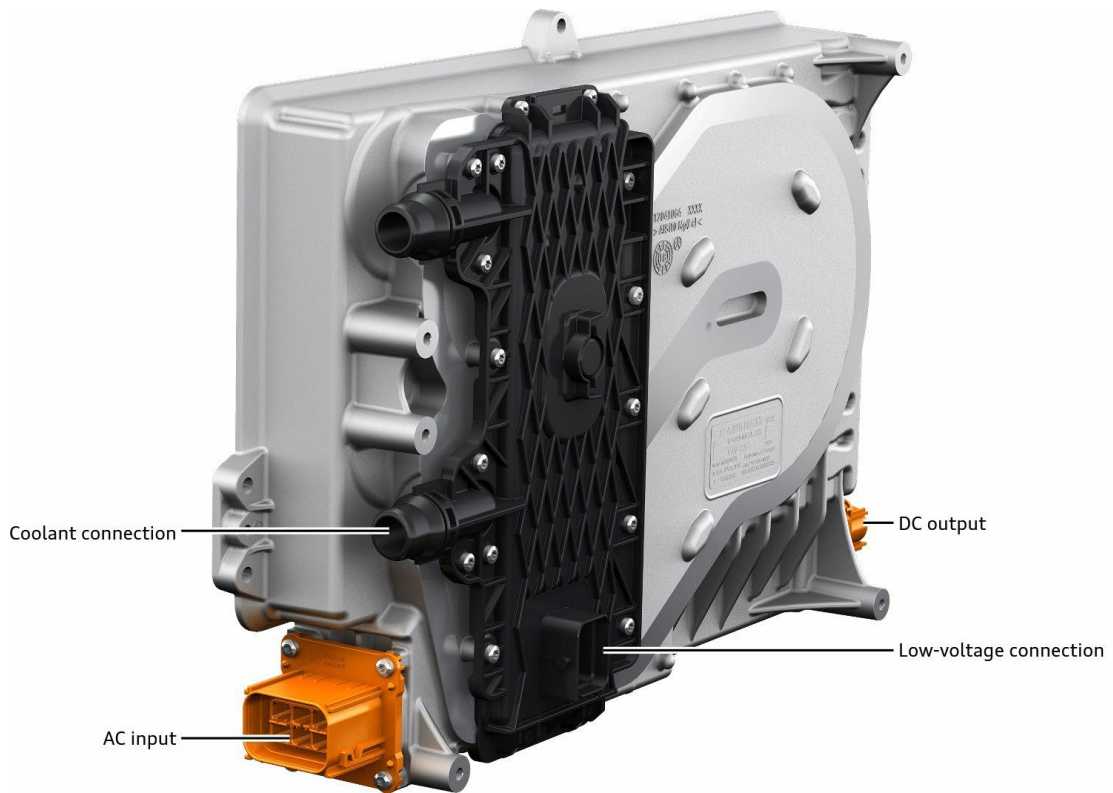
Model Name	Bentley Bentayga Hybrid
Engine Identification Number	EALD
Engine Management System	BOSCH MG1
Nominal Voltage	374.4V
EASA (Front Axle)	
Transmission Arrangement (Parallel / Transaxial / Other)	Parallel Hybrid
Motor Maximum Speed	7000 rpm
Gearbox Outlet Shaft (gear engaged)	8 Gears Automatic Transmission
Direct Current (DC) / Alternating Current (AC) number of phases	Alternated Current (AC) / 3 phases
Maximum Net Torque (at zero speed) acc. to SAEJ2907	400 Nm
Maximum Net Power	100 kW @ 2600 rpm
Maximum Net Torque	400 Nm @ 2550 rpm
Horsepower	134 HP @ 2600 rpm

12.4 Battery details

Battery Manufacturer	Samsung SDI
Battery Type / Chemistry	Lithium Ion Polymer
Number of Battery Cells	104
Cell Design	Prismatic
Number of Battery Modules	8
Battery Cathode	NCA –Nickel, Cobalt, Aluminim
Battery Anode	Graphite based,
Electrolyte Type	Seperator Electrolyte,
Total Weight of Battery System	131.4 kg
Nominal voltage	374.4 Volt
Battery Working Voltage	291.2-436.8 Volts
Total System Energy Capacity (Ah)	Gross: 50.7 Ah Net: 48.2 Ah
Energy Density (Wh/Kg)	137 Wh/kg
Battery Thermal Management	liquid

12.5 Charging details

Charging unit 1 for high-voltage battery AX4



685_091

The charging unit converts the AC current from the charging connection to DC current. Two versions with different charging power are available. There is a 7.2 kW or an 11 kW charging unit. The charging unit is in the rear of the vehicle under the subframe and can be accessed from below. The underbody guard and the anti-roll bar must be detached to remove the charging unit.

The charging unit itself is water-cooled. The conversion to direct current is performed via electrical isolation.

Input	78 V - 272 V
	16 A - 32 A
Output	220 V - 470 V
Phases	1, 2, 3-phase AC charging
Max. AC charging power	7.2 kW - 11 kW
Efficiency	94 %
Operating range	-40°C - 65°C
Weight	9 kg - 11 kg

The charging unit is regulated by control unit for high-voltage battery charging unit J1050. It monitors and regulates the charging process.

The following components are connected directly to charging unit 1 for high-voltage battery AX4:

- > Actuator for high-voltage charging flap lock 1 F496
- > LED module for charging socket 1 L263
- > Actuator for high-voltage charging socket lock 1 F498

- > High-voltage battery charging socket 1 UX4 with:
- > Temperature sender for charging socket 1 G853
- > Temperature sender 2 for charging socket 1 G1151
- > Temperature sender 3 for charging socket 1 G1152

High-voltage battery charging socket 1 UX4



AC

Connector (Europe)	Type 2
Number of phases	2 - 3
Max. AC charging power	7.2 kW - 11 kW

Charging displays

Light on charging unit		Meaning
White	Pulsating	Connecting
Green	Pulsating	Charging high-voltage battery
Green	Pulsating and flashing red	Emergency charging mode active. Reduced charging power, fault
Green	Lit up	Charging process completed
Red	Lit up	Charging connector not locked, outside temperature too low or too high

Manual release mechanism for charging connector

If the charging connector cannot be unplugged from the vehicle charging connection, it must be released manually. To do this, the parking brake must be closed and the vehicle unlocked.



Note

For detailed information, please refer to the Owner's Manual.

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

14.0 Request for Certificate

14.1 Statement of Compliance

Based on good engineering judgment, the Volkswagen Group states that all the vehicles described in this application for Certification comply with all applicable standards and regulations, incl. the provisions of 40 CFR Parts 85, 86 and 600.

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 is using standard technology in all MY2027 vehicles ORVR systems. In accordance with EPA Guidance letter CISD-06-06, ORVR application will not be submitted.

Mr. Joshua Kimball
Compliance and Innovative Strategies Division
Office of Mobile Sources
U. S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

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

April 30, 2026 Date

Subject: MY 2027 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group VVGAT03.0NAQ with Evaporative Family
VVGAR0155NCV.

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>
VVGAT03.0NAQ	Tier 4 Bin 125 LEV IV 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: 2026.04.30 13:04:08 -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: 04/20/2026

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

VGA

Manufacturer Name *

Volkswagen Group of America

Contact Name *

Gregory 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 *

VVGAT03.0NAQ

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 Bentley Certification Fee for VVGAT03.0NAQ
Pay.gov Tracking ID: 281ID1O1
Agency Tracking ID: 77362400381

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.

The content of this document may contain Sensitive But Unclassified (SBU) data and/or Controlled Unclassified Information (CUI).

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
Tony.DAmbrosi@vw.com E-Mail
April 30, 2026 Date

Subject: MY 2027 Volkswagen Group Light Duty Vehicle Initial Application for Emissions
Certification for Test Group VVGAT03.0NAQ with Evaporative Family
VVGAR0155NCV.

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>
VVGAT03.0NAQ	Tier 4 Bin 125 LEV IV 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: 2026.04.30 13:04:50 -04'00'

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

Enclosure(s)

California ARB Information

17.1 California Compliance Statements

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 the Section 16

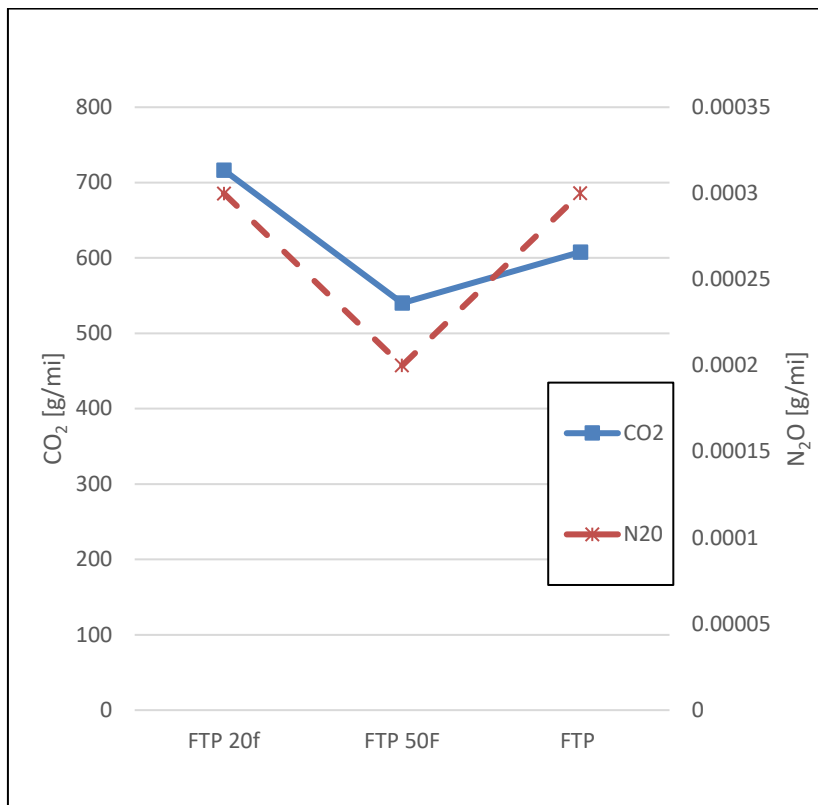
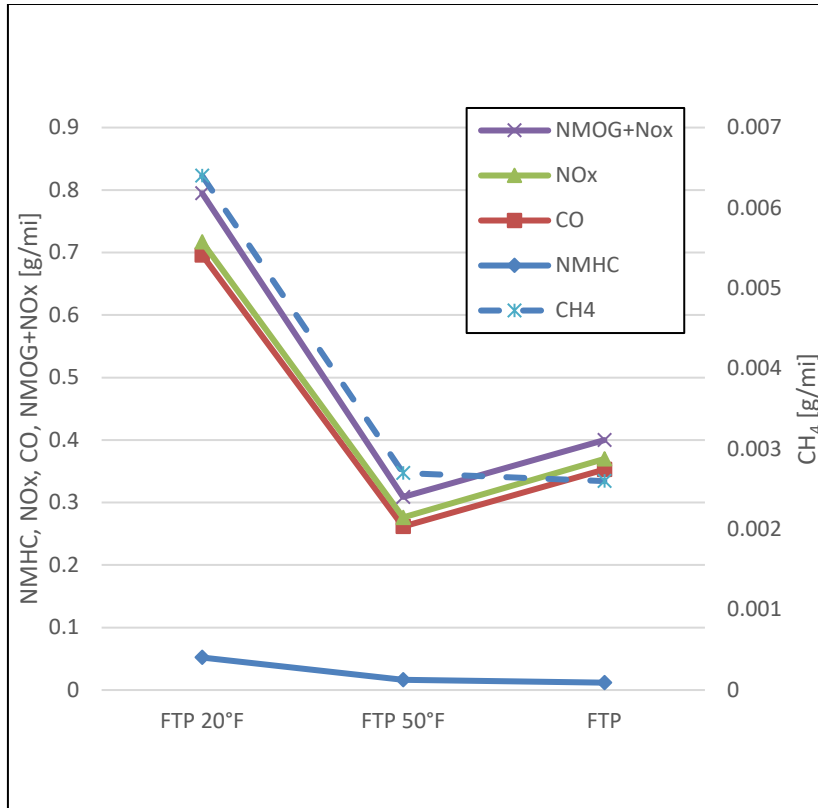
17.3 Evaporative Emission Deterioration Program

Please refer to Common Section Application

17.4 Assembly line NMOG / NMHC Factor

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

17.5 Continuity of Emissions



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					0.38			
150k	*	0.0149	0.0149	0.0115	0.38	0.5	0	0.0264

*120k

17.7 Recharging Procedures

Please refer to Section 12.5 Charging details

17.8 Climate Control System Description

Please refer to Section 16.7

17.9 Battery Specific Energy data and Calculations (C/3 energy capacity)

N/A.

Non ZEV PHEV.

17.10 Vehicle and Battery Break-in

Bentley PHEVs are operated on-track for 4000 miles using the Standard Road Cycle (SRC).


17.11 Proper and Safe Operation of the Vehicle

Please refer to Section 16.4


VWGoA has implemented a nationwide recycling program for the transportation and recycling of lithium ion (li-ion) batteries used to power full battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). The program is available to affiliate dealers.

Additionally, as part of the Alternative Fuel Vehicles Safety Training Program, VW Group vehicles have an extensive list of precautionary / safety related measures that can be found at the link: [Bentley - Emergency Response Guides \(nfpa.org\)](https://www.nfpa.org)

21.0 Vehicle Emission Control Information Label

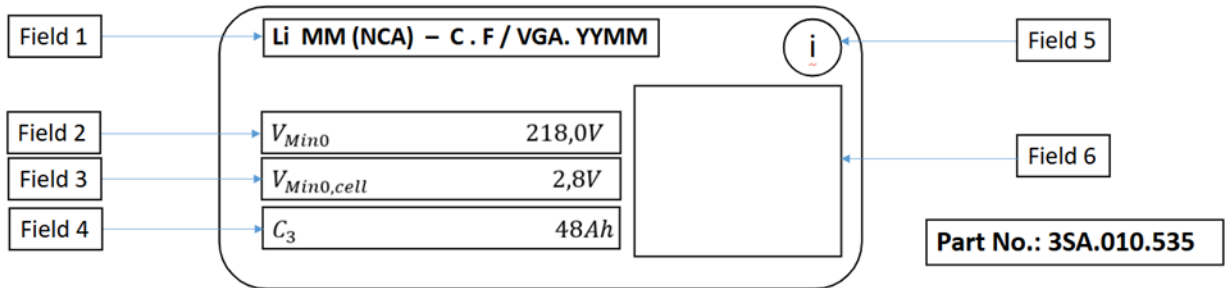
 BENTLEY MOTORS LIMITED	VEHICLE EMISSION CONTROL INFORMATION CONFORMS TO REGULATIONS 2027 MODEL YEAR			
	U.S. EPA	Bin 125 LDT4	OBD:CAII	FUEL GASOLINE
	CALIFORNIA	ULEV 125 LDT	OBD:CAII	FUEL GASOLINE
	NO OTHER ADJUSTMENT NEEDED			
	CONTROL DFI / TC / 2CAC / TWC / WR-HO2S / HO2S			
	GROUP	VVGAT03.0NAQ	EVAP	VVGAR0155NCV

This vehicle is equipped with a permanent all-wheel drive system and is exempt from I/M testing on a two wheel drive dynamometer



36A.010.025.A.K

21.1 Battery Information Label



Field No.	Description of Data
Field 1	Chemistry Identifier According to SAE J2984: Data According to Product Data Sheet E071-MLB53AW MSB 102s1p from Samsung SDI Battery Systems <ul style="list-style-type: none"> Li (Lithium Ion): System Chemistry. MM (NCA): General Mixed Metal Cathode (Mixed Metal Oxide Ni, Co, Al based). C (Graphite Based): Anode Active Material Identifier. F (Flammable Liquids): Miscellaneous Identifier. VGA (VW Group America): Responsible Party ID. YYMM (Year & Month): Date of Battery/Vehicle Manufacture.
Field 2	Minimum voltage of the battery pack according to INL/EXT-15-34184 Battery Test Manual For Electric Vehicles, Revision 3, June 2015.
Field 3	Cell voltage when the battery pack is at of the battery pack according to INL/EXT-15-34184 Battery Test Manual For Electric Vehicles, Revision 3, June 2015.
Field 4	Rated capacity of the battery pack based on the C-rate (3) according to SAE J2288.
Field 5	Product information symbol according to ISO 7000:2760
Field 6	Digital identifier according to ISO/IEC 18004:2015. QR Code according to TAB.059.000. Gives access to a battery's product passport.

21.2 Engine Control Module (ECM) Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Electronic Control Module (ECM)	DCBE+EALD / AL552E-8Q	36A559K 0002BVBB	0C B8 CB F3	36A907559K	0002
CCU	DCBE+EALD / AL552E-8Q	CCU057E 00370000	5A C7 A5 98	0D7142057E	0037

21.3 Transmission Control Module (TCM) Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Transmission	DCBE+EALD / AL552E-8Q	36A158BD00032000	DF 79 36 82	36A927158BD	0003
ATF Oil Pump	DCBE+EALD / AL552E-8Q	0D7281E+0703IEP0	ED FF 23 4E	0D7321281E	0703

21.4 Gateway Control Module Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Gateway / Active Pedal	DCBE+EALD / AL552E-8Q	GW4KL468S-0052--	D3 A0 70 0A	4KL907468S	0052

21.5 Battery Energy Control Module (BECM) Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
BMC	DCBE+EALD / AL552E-8Q	4M4233CC03942---	19 AC 5A C7	4M4915233CC	0394
BJB	DCBE+EALD / AL552E-8Q	4M0254AH01340000	A5 A0 55 85	4M0915254AH	0134
Cells 1-8	DCBE+EALD / AL552E-8Q	4M0116L 0204CI00 & 4M0116M 0204CI00	C2 D0 81 08 & 2D 12 EA 36	4M0915116L & 4M0915116M	0204
OBC	DCBE+EALD / AL552E-8Q	9Y0681AK3322JVBB	C3 20 8C 51	9Y0915681AK	3322

21.6 Brake Booster Control Module Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Brake Booster	DCBE+EALD / AL552E-8Q	4M0059M-0291e100	B0 AC AB DA	4M0909059M	0291
Regen Brake	DCBE+EALD / AL552E-8Q	4M0057--0154xxxx	A8 DB 00 C7	4M0909057B	0154

21.7 Brake System Control Module Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
ABS	DCBE+EALD / AL552E-8Q	4M6379BD0915B0!2	2C 14 ED 89	4M6907379BD	0915

21.8 Drive Motor Control Module (DMCM) Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Drive Motor	DCBE+EALD / AL552E-8Q	4M2170E 0075AVAA	B2 99 DA 55	4M2907170E	0075

21.9 High Voltage Thermal Management Control Module (VTMC) Information

Module	Engine Code / Transmission	Cal ID	CVN	SW-Part number	SW Version
Thermal Management	DCBE+EALD / AL552E-8Q	4M0429BCKCJB0255	E3 A5 4F 46	4M0965429BC	0401
EKK	DCBE+EALD / AL552E-8Q	4G0797G 00190015	BC 24 D4 8F	4G0816797G	0019