

PORSCHE

Application for Certification: Initial Part 1

Model Year: 2027

Durability Group: VPRXGPGNNCE8

Test Group: VPRXJ04.0CE8

Evaporative/Refueling Family(ies): VPRXR0176RED
VPRXR0190RP7

Certification Summary Information Report Number(s): CSI-VPRXJ04.0CE8-VPRXR0176RED
CSI-VPRXJ04.0CE8-VPRXR0190RP7

Durability Group Description: Four Stroke, Otto Cycle, Gasoline-Fueled Direct Injection, Unheated Monolith Ceramic Catalyst

Test Group Description: 4.0 Liter 8-Cylinder LDT
4.0 Liter 8-Cylinder PC

Applicable Standards: EPA Exhaust: BIN 70, INT-TIER 4
CARB Exhaust: ULEV 70, LEV IV
EPA Evap: Tier 3
CARB Evap: LEV IV

Carlines Covered: Cayenne S
Cayenne S Coupe
Cayenne GTS
Cayenne GTS Coupe
Panamera GTS

Vehicles Tested: **Exhaust:** ECFE-9YAGTS-25
Evap: EC-9YA-AT-24
Evap: FE-972-AT-24

Agency Response Requested By: June 8, 2026

Special Instructions: N/A

For Questions Contact: emissions@porsche.us

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Section 1~Correspondence and Communications

Persons Authorized to
Contact Agencies:

Regulatory Affairs
Porsche Cars North America, Inc.
One Porsche Drive
Atlanta, Georgia 30354
E-mail: emissions@porsche.us

Section 2~Durability Group Description

Durability Group Name: VPRXGPGNNCE8

Combustion Cycle: 4-stroke otto

Engine Type: 8-cylinder, v-shaped arrangement

Fuel Used: gasoline

Basic Fuel Metering System: direct injection

Catalyst Construction: Refer to Section 16.02

Catalyst Type: Refer to Section 16.02

Model(s):

Cayenne S / GTS, Panamera GTS

Catalyst Primary and Secondary Bricks:

Precious Metal Composition, Primary:

Precious Metal Composition, Secondary:

Precious Metal Loading, Primary (g):

Precious Metal Loading, Secondary (g):

Number of cans (lines):

Total Precious Metal Loading (g):

Refer to Section 16.02

Particulate Filter: Refer to Section 16.02

	<u>GS</u>	<u>% of Max GS</u>
Cayenne S / GTS, Panamera GTS	Refer to Section 16.02	

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Section 3~Evaporative / Refueling Family Description

Evaporative/Refueling Families

Please refer to Section 3 of the LDT Common Section for a detailed description of this Evaporative/ORVR system.

Family Name	VPRXR0176RED
Carryover Family	TPRXR0176RED
Models Covered	Cayenne Series (V6 and V8, non-hybrid)
In-Use Performance	To date, no Porsche vehicle ORVR systems have exhibited problems in the field.
ORVR Family: Carryover	Carried over ORVR family originally approved by EPA on 10/16/2002 (1) No substantial changes have been made from the previously certified system (2) Porsche is not aware of any in-use problems with this system as of this time (3) Please refer to the Porsche LDV/LDT Common Section documentation for the ORVR system description.

Section 3~Evaporative / Refueling Family Description

Evaporative/Refueling Families

Please refer to Section 3 of the LDV Common Section for a detailed description of this Evaporative/ORVR system.

Family Name	VPRXR0190RP7
Carryover Family	TPRXR0190RP7
Models Covered	Panamera
In-Use Performance	To date, no Porsche vehicle ORVR systems have exhibited problems in the field.
ORVR Family	Carried over ORVR family originally approved by EPA on 10/16/2002 (1) No substantial changes have been made from the previously certified system (2) Porsche is not aware of any in-use problems with this system as of this time

Section 4~Durability Procedure Description

Exhaust / Evaporative Deterioration

Based on Porsche's engineering judgment, all the vehicles described in this Application for Certification comply with all applicable useful life standards.

Exhaust Deterioration Factors (g/mile):

Method: Porsche SBC

Cayenne S / GTS, Panamera GTS

<u>Basis</u>	<u>NMOG</u>	<u>NOx</u>	<u>NMOG + NOx</u>	<u>CO</u>	<u>HCHO</u>	<u>N2O</u>	<u>CH4</u>	<u>PM</u>	<u>NMHC</u>
150K *	0.0054	0.0096	0.015	0.0408	0.0002	0.0001	0.0028	0.00001	0.0049

*N2O and CH4 basis is 120K

Evaporative Deterioration Factors:

VPRXR0176RED

Audi ADP

<u>Basis</u>	<u>2-day</u>	<u>3-day</u>	<u>RL</u>	<u>ORVR</u>
150K	0.0108	0.0140	0.0000	0.007

VPRXR0190RP7

Porsche SBC

<u>Basis</u>	<u>2-day</u>	<u>3-day</u>	<u>RL</u>	<u>ORVR</u>
150K	0.0000	0.0000	0.000	0.001

Section 5~Test Group Description

Durability Group Name:	VPRXGPGNNCE8
Test Group Name:	VPRXJ04.0CE8
Certification Summary Information Reports:	CSI-VPRXJ04.0CE8-VPRXR0176RED CSI-VPRXJ04.0CE8-VPRXR0190RP7
No. Cylinders and Arrangement	8-cylinder, v-shaped arrangement
Engine Displacement:	4.0 Liter 4.0 Liter
Vehicle Classe(s):	LDT4 PC
NLEV Participation:	No
Emissions Standards Class:	Federal: BIN 70, INT-TIER 4 California: ULEV 70, LEV IV
Applicable Emissions Standards:	Please refer to the Certification Summary Information Report in Section 7
Hybrid Description:	N/A

Section 6~Test Vehicle Description

6.01>> Test Vehicles

	Test Vehicle ID	Vehicle/Config Purpose
Certification Test Vehicles:	ECFE-9YAGTS-25	Exhaust Emissions
	EC-9YA-AT-24	Evaporative Data (Cayenne)
	FE-972-AT-24	Evaporative Data (Panamera)
Durability Test Vehicles:	DDV-9YA-AT-24	Exhaust Durability
	DF-972-AT-24	Exhaust Durability

Test Vehicle Information	Exhaust	Evaporative	Evaporative
Test Group Name	SPRXT04.0CE8	RPRXT03.0CV6	RPRXV02.9PV6
Evaporative Family Name	SPRXR0176RED	RPRXR0176RED	RPRXR0190RP7
Test Vehicle ID	ECFE-9YAGTS-25	EC-9YA-AT-24	FE-972-AT-24
Test Vehicle Model Name	Cayenne GTS Coupe	Cayenne	Panamera
Engine Code	DWH	DCB	CSZ
Displacement (L)	4.0	2995	0.0
Rated Engine Power (HP)	493	348	348
Transmission	AMS-8	AMS-8	AT
Equivalent Test Weight (ETW) (lbs)	5500	5250	4750
Gross Vehicle Weight (lbs)	6371	6217	5523
Axle Ratio	3.21	3.21	3.36
Drive Mode for Testing	AWD	AWD	RWD
SIL usage	No	No	No
Start - Stop	Yes	Yes	Yes
Aged components	No	No	No
Fuel	Gasoline	Gasoline	Gasoline
Drive Source	ICE	ICE	ICE
Fuels stored separately or together	N/A	N/A	N/A
Fuels combusted separately or together	N/A	N/A	N/A
RESS type	N/A	N/A	N/A
Off-board charge capable	N/A	N/A	N/A
Regenerative Braking	N/A	N/A	N/A

Note: blank cells or tables are intentionally blank

Section 6~Test Vehicle Description

6.02>> Test Parameters, Instructions

Carlines	Cayenne and Panamera		
Engine Starting Procedures	1) Depress brake pedal 2) Turn ignition key clockwise or press button to crank (do not depress accelerator pedal), release key/button as soon as engine starts 3) If engine fails to start within 15 seconds, turn ignition key to the OFF position or depress button, wait 10 seconds, then restart		
Transmission Shift Schedules, Mode	Transmission	Automatic, 8-speed	
	1st to 2nd	N/A	
	2nd to 3rd	N/A	
	3rd to 4th	N/A	
	4th to 5th	N/A	
	5th to 6th	N/A	
	6th to 7th	N/A	
	7th to 8th	N/A	
	SS II.D.	FTP – FTA; HWFE - HWA	
Transmission Mode	Auto Mode: operate in "D" and auto mode only. Do not shift manually		
Selectable modes	Start-stop	Leave in default mode -- indicator on center console should not be illuminated	
	Other (Sport, Wet, etc.)	Leave all selectable mode buttons in default	
Other	Cooling fan	One road-speed fan, centered upright, front of vehicle	
	Body apertures	Leave all apertures closed	
	Test lab considerations	Porsche can supply instructions separately for E-Brake, Dyno Mode, Soak Area, and Canister loading	

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Section 6~Test Vehicle Description

6.03>> Dynamometer Parameters

Vehicle ID	Trans	ETW [lbf]	Single Roll Coefficients (target)		
			A [lbf]	B [lbf/mph]	C [lbf/mph ²]
ECFE-9YAGTS-25	AMS-8	5500	54.81	0.1096	0.02916
EC-9YA-AT-24	AT	5250	42.76	0.4385	0.02611
FE-972-AT-24	AT	4750	37.45	0.5333	0.01900

Vehicle ID	Trans	ETW [lbf]	Single Roll Coefficients (set)		
			A [lbf]	B [lbf/mph]	C [lbf/mph ²]
ECFE-9YAGTS-25	AMS-8	5500	0.63	-0.0434	0.02779
EC-9YA-AT-24	AT	5250	-11.19	0.5178	0.02326
FE-972-AT-24	AT	4750	22.61	0.28745	0.01955

Note: Porsche's RLHP measurement and calculation methods are available upon request.

Note: blank cells or tables are intentionally blank.

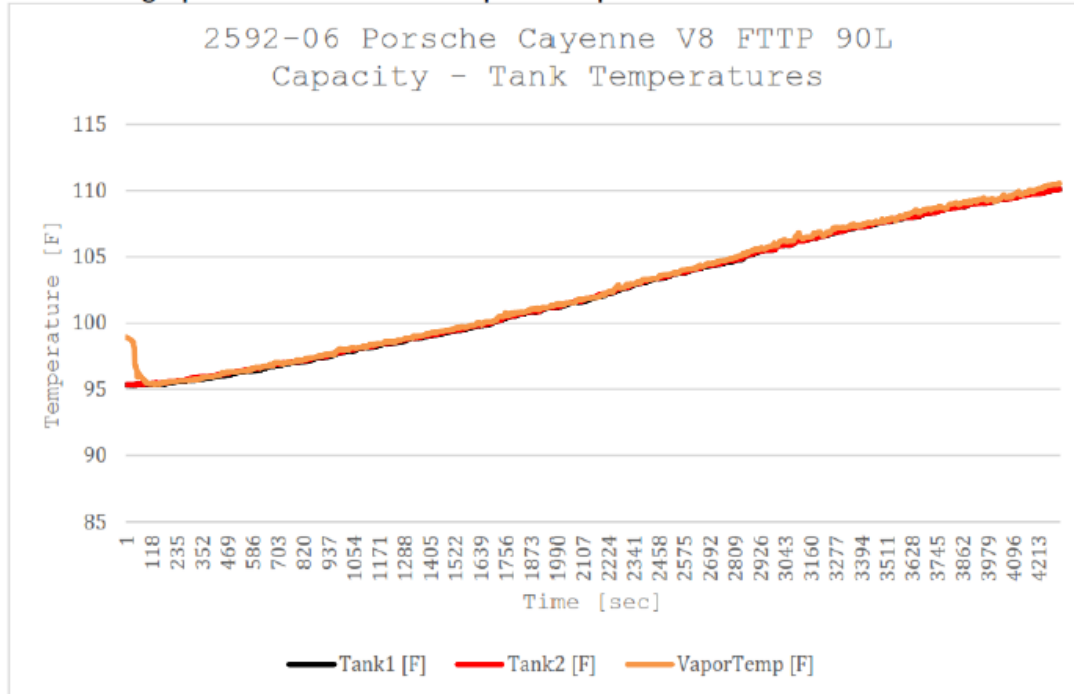
Section 6~Test Vehicle Description

6.04>> FTTP Summary

Carlines	Cayenne	
Evaporative Testing Parameters	Canister Loading	Canister Working Capacity =176g
	FTTP REPORT ID *	150RED-2592-06

TEST RESULTS

The graph below shows the temperature profile for the duration of the test.

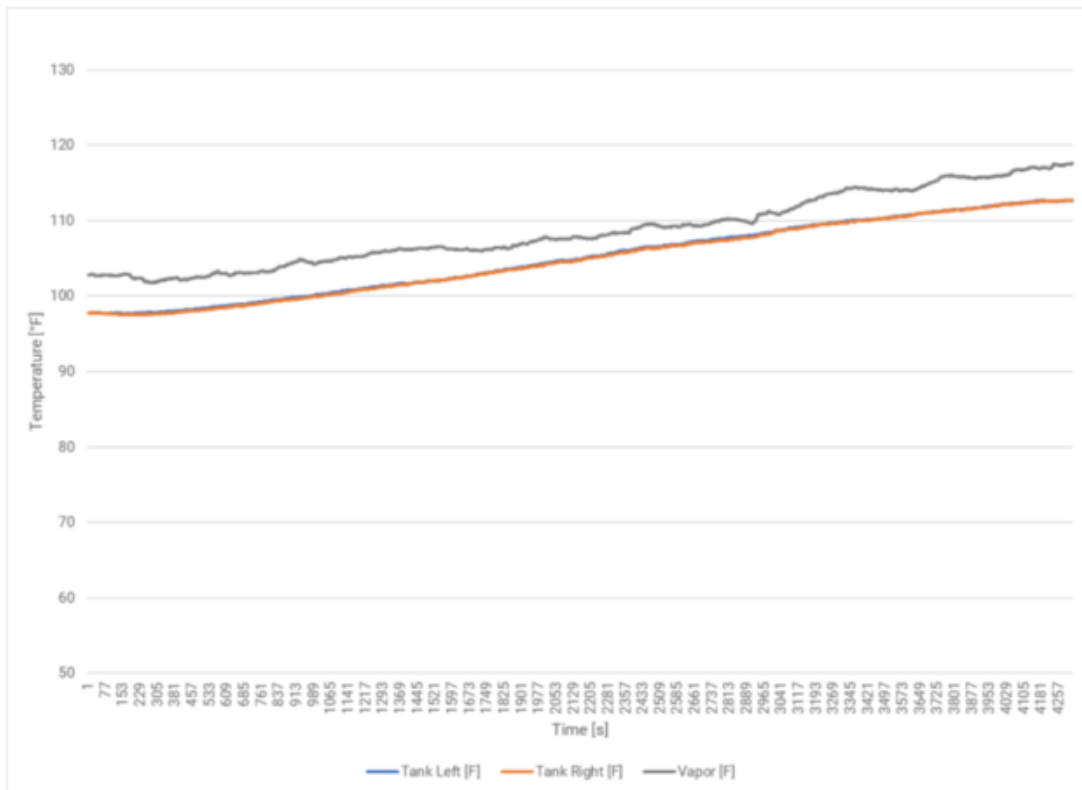


* Full report is available for review

Section 6~Test Vehicle Description

6.04>> FFTP Summary

Carlines	Panamera, all models except hybrids, 90 L tank	
Evaporative Testing Parameters	Canister Loading	Canister Working Capacity = 190g
	FFTP REPORT ID *	23051648



* Full report is available for review

Section 6~Test Vehicle Description

6.05>> Durability Test Vehicle(s)

Available by request.

Section 7~Test Results

7.01>> Exhaust / Evaporative Standards

Exhaust Standards:

Federal: BIN 70, INT-TIER 4

California: ULEV 70, LEV IV

Test Cycle	Constituent	Certification Standard (g/mi)		High Altitude (g/mi)	In-Use Standard (g/mi)	
		Federal	California		Federal	California
FTP	NMOG+NOx	0.070	0.070	0.105	0.070	0.070
	CO	1.7	1.7	1.7	1.7	1.7
	HCHO	0.004	0.004	0.004	0.004	0.004
	PM	0.003	0.003	0.003	0.003	0.003
	CH4	0.030	0.030	0.030	0.030	0.030
	N2O	0.010	0.010	0.010	0.010	0.010
HFET	NMOG+NOx	0.070	0.070	0.070	0.070	0.070
SFTP	Composite NMOG+NOx	0.080	--	0.080	0.080	--
	Composite CO	4.2	--	4.2	4.2	--
	Fleet Average NMOG+NOx	0.050	--	--	0.050	--
US06	NMOG+NOx	--	0.070	--	--	0.084
	CO	--	9.6	--	--	--
	PM	0.006	0.006	--	0.010	0.010
SC03	NMOG+NOx	--	0.050	--	--	--
	CO	--	1.7	--	--	--
Cold CO	CO	10.0	10.0	--	10.0	10.0
	NMHC	0.3	0.3	--	0.3	0.3
50 Deg F	NMOG+NOx	--	0.100	--	--	--
	CO	--	1.7	--	--	--
	HCHO	--	0.016	--	--	--

-- = N/A

Evaporative Standards: Cayenne

Test Cycle	Constituent	Certification Standard		High Altitude	In-Use Standard	
		Federal	California		Federal	California
2-Day	HC-EQUIV (g/test)	0.450	0.450	1.10	0.450	0.450
3-Day	HC-EQUIV (g/test)	0.450	0.450	1.10	0.450	0.450
Running Loss	HC-EQUIV (g/mi)	0.05	0.05	0.05	0.05	0.05
ORVR	HC-EQUIV (g/gal)	0.20	0.20	0.20	0.20	0.20
BETP	HC-EQUIV (g/test)	0.020	0.020	--	--	--

Section 7~Test Results

7.01.01>> Exhaust / Evaporative Standards

Evaporative Standards: Panamera

Test Cycle	Constituent	<u>Certification Standard</u>		<u>High Altitude</u>	<u>In-Use Standard</u>	
		Federal	California		Federal	California
2-Day	HC-EQUIV (g/test)	0.400	0.400	0.85	0.400	0.400
3-Day	HC-EQUIV (g/test)	0.400	0.400	0.85	0.400	0.400
Running Loss	HC-EQUIV (g/mi)	0.05	0.05	0.05	0.05	0.05
ORVR	HC-EQUIV (g/gal)	0.20	0.20	0.20	0.20	0.20
BETP	HC-EQUIV (g/test)	0.020	0.020	N/A	N/A	N/A

Section 7-Test Results

7.02>> GHG Compliance Statements / Certification Tests

GHG in-use standards: Please refer to the VW Group's final GHG Report for this Model Year.

Start-Stop: For all models in this test group, the Auto Start-Stop system defaults to ON. Therefore, in-use tests should be conducted in the Default mode, and no weighting of test data is required for demonstrating compliance with in-use GHG standards.

N₂O and CH₄: Please see attestations of GHG fleet averaging in Section 8.02. Porsche has elected to comply with N₂O and CH₄ standards for all test groups of the following model year:

2027

Certification Tests

Exhaust:			
SPRX10087043	FTP		
SPRX10087044	HFET		
SPRX10087045	US06		
SPRX10087046	SC03		
SPRX10087048	Cold CO		
SPRX10087047	50 F		

Evaporative:		(VPRXR0176RED)
RPRX10079772		2-Day Evap
RPRX10079773		3-Day Evap
RPRX10079775		Running Loss
RPRX10079774		ORVR
RPRX10079786		BETP

GHG Compliance:	
SPRX10087056	FTP
SPRX10087057	HFET

Evaporative:		(VPRXR0190RP7)
RPRX10082417		2-Day Evap
RPRX10082438		3-Day Evap
RPRX10082462		Running Loss
RPRX10082434		ORVR
RPRX10082495		BETP

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Section 7-Test Results

7.03>> CSI Report, Evap Family VPRXR0176RED

The Certification Summary Information (CSI) report begins on the following page.

Certification Summary Information Report

Test Group	VPRXJ04.OCE8	Evaporative/Refueling Family	VPRXR0176RED
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Evaporative/Refueling Family Information

Evaporative Summary Information Type	New	Submission/Correction Date	03/23/2026 03:32:27 PM
Integrated ORVR?	Yes	Fuel(s)	Gasoline
Multiple Fuel Storage	--		
Bladder Fuel Tank?	No		
Fuel Tank Material	Plastic	Fuel Tank Material Description	Plastic
Fill Pipe Seal Type	Liquid seal		
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	--
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	176	Number of Primary Canisters	1
Number of Bleed Canisters	1	Bleed Canister Total Working Capacity (grams)	176
Mfr Evaporative/Refueling Family Comments	Evap system for Cayenne; all ICE, non-hybrid models		

Leak Family Details

Leak Family Indicator	Yes		
Canister Bleed Test Indicator	Yes	Applicability of Evaporative Canister Bleed Test	50 State
Evaporative Canister Bleed Test Comments	--		
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--
CARB Fuel Only (Rig) Test Comments	--		

Leak Family Name	Applicability of Leak Family Requirements	Leak Family Standard (inches)	Leak Family Description
VPRXR0176RED-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
Porsche AG	1 - Porsche	425 - Cayenne GTS Coupe	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	425 - Cayenne GTS Coupe	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	415 - Cayenne S Coupe	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	420 - Cayenne GTS	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	410 - Cayenne S	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	415 - Cayenne S Coupe	Federal	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	410 - Cayenne S	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes
Porsche AG	1 - Porsche	420 - Cayenne GTS	California + CAA Section 177 states	All Wheel Drive	Semi-Automatic	8	Yes

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Engine Description			
Hybrid Type	--	Hybrid Description	--
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W40
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N
After Treatment Device(s) (ATD)			
ATD Number	ATD Type	ATD Precious Metal	Substrate Material
1	Three-way catalyst	Palladium + Rhodium	Ceramic
2	Three-way catalyst	Palladium + Rhodium	Ceramic
Mfr After Treatment Device (ATD) Comments	--		
Direct Ozone Reduction (DOR) Device	Not Equipped		
Mfr Emission Control Device Comments	2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC		
Engine Configuration Number 1			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	493
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	VarioCam		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	VarioCam Plus		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	--	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Cayenne GTS Models - 2TWC/DFI/2WR-HO2S/2HO2S/2TC/2CAC		

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Engine Configuration Number 2			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	468
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	VarioCam		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	VarioCam Plus		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	--	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Cayenne S Models - 2TWC/DFI/2WR-HO2S/2HO2S/2TC/2CAC		

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Engine Configuration Number 3			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	493
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	VarioCam		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	VarioCam Plus		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	--
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	--		
Air Injection Type	--	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Panamera GTS Models - 2TWC(2)/DFI/2WR-HO2S/2HO2S/2TC/2CAC		

Official Test Numbers

Test Group	Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Gasoline		SPRX91006032	SPRX91006001	SPRX10087046	SPRX10087048	SPRX91006002	--	228.2	--	286.1	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Gasoline	SPRX91006032	SPRX91006001	SPRX10087046

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Dynamometer Coefficients:

Coefficient Category	Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	
City/Highway/Evap	42.759	0.4385	0.026108	-11.186	0.51776	0.023261	17.3
Cold CO	42.759	0.4385	0.026108	-11.186	0.51776	0.023261	N/A
US06	42.759	0.4385	0.026108	-11.186	0.51776	0.023261	N/A

Emission Control Device Comments --

Manufacturer Test Vehicle Comments Porsche Internal Name: SE0494 Evaporative emissions, emissions and evaporative durability

Test #	RPRX10079772	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	RPRX10079720	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	01/20/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	2650	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)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2209	--

Manufacturer Test Comments 2-day evap, E10 fuel; Porsche test number 23000166

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	0.2209	0.0108	0.232	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2209	0.0108	0.232	0.450	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	RPRX10079773	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	RPRX10079745	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	02/18/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4484	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	Yes
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.194	--

Manufacturer Test Comments 3-day evap, E10 fuel; Porsche test number 23031890

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	0.1940	0.014	0.208	0.450	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.1940	0.014	0.208	0.450	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Test #	RPRX10079774	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	RPRX10079746	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	02/02/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	6967	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)
HC (Hydrocarbon for Running Loss and ORVR)	0.0165	--

Manufacturer Test Comments ORVR for evap; E10 fuel; Porsche test number 23000162

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.016	0.007	0.02	0.20	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.016	0.007	0.02	0.20	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	RPRX10079775	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	RPRX10079745	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	02/17/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4466	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	--
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

Manufacturer Test Comments Running Loss test, E10 fuel; Porsche test number 23033952

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.000	0	0.00	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.000	0	0.00	0.05	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	RPRX10079786	Test Procedure	65 - Evap Canister Bleed Test
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	03/08/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Calculated (1.08 x FID Total Hydrocarbons)		
Test Start Odometer Reading	4542	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	--
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.013168	--

Manufacturer Test Comments BETP; E10 fuel; Porsche test number 23035779

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	0.0132	0	0.013	0.020	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0132	0	0.013	0.020	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED						
Emission Data Vehicle Information									
Vehicle ID / Configuration	ECFE-9YAGTS-25 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	SPRXT04.0CE8	Original Evaporative/Refueling Family	SPRXR0176RED						
Original Test Vehicle Model Year	2025								
Vehicle Model									
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne GTS Coupe						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>			Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.985						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	DWH	Rated Horsepower	493						
Displacement (liters)	4								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5108	Equivalent Test Weight (pounds)	5500						
GVWR (lbs)	6371	N/V Ratio	23						
Axle Ratio	3.21								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0176RED
Dynamometer Coefficients:								
		Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	42.2	0.4877	0.02479	-6.97	0.4608	0.02181	17.1	
Cold CO	46.42	0.5365	0.02727	-20.72	0.4145	0.02465	N/A	
US06	42.2	0.4877	0.02479	-6.97	0.4608	0.02181	N/A	
Emission Control Device Comments	2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC							
Manufacturer Test Vehicle Comments	EXHAUST EMISSIONS VEHICLE, CAYENNE GTS COUPE; Internal vehicle ID: SE0743; CITY/HWY/US06 TARGET A COEFFICIENT: 42.20							

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX10087047	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	05/21/2024	Fuel	Gasoline
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4330	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)	527.4971	--
FE BAG 1 (Bag 1 Fuel Economy)	16.4086	16.4086
CO2 BAG 2 (Bag 2 Carbon Dioxide)	481.6911	--
FE BAG 2 (Bag 2 Fuel Economy)	17.9968	17.9968
CO2 BAG 3 (Bag 3 Carbon Dioxide)	411.3918	--
FE BAG 3 (Bag 3 Fuel Economy)	21.0669	21.0669
METHANE (CH4 - Methane)	0.0037	--
CO (Carbon Monoxide)	0.1063	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.532	--
DT-EER (Drive Trace Energy Economy Rating)	-0.0616	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.3942	--
MFR FE (Manufacturer Fuel Economy)	18.3652	18.3652
NOX (Nitrogen Oxide)	0.0125	--
N2O (Nitrous Oxide)	0.0006	--
HC-NM (Non-methane Hydrocarbon)	0.0105	--
NMOG (Non-methane organic gases)	0.0115	--
PM (Particulate Matter)	0.0017	--
HC-TOTAL (Total Hydrocarbon)	0.0141	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	472	--

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	471.8305	--

Manufacturer Test Comments 50F EXHAUST EC Test No. 20240521TC101

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	150,000 miles	California LEV-IV ULEV70	CO	0.11	--	--	--	0.04	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0115	--	--	--	0.0054	--	0.017	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0240	--	--	--	--	--	0.039	0.140	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0125	--	--	--	0.0096	--	0.022	999.999	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX10087048	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	05/22/2024	Fuel	Gasoline
Fuel Batch ID	TCC10	Fuel Calibration Number	20
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4401	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0072	--
CO (Carbon Monoxide)	0.2183	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.2751	--
DT-EER (Drive Trace Energy Economy Rating)	-0.5662	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.9686	--
MFR FE (Manufacturer Fuel Economy)	15.9043	15.9043
NOX (Nitrogen Oxide)	0.0491	--
N2O (Nitrous Oxide)	0.0008	--
HC-NM (Non-methane Hydrocarbon)	0.0336	--
NMOG (Non-methane organic gases)	0.0369	--
HC-TOTAL (Total Hydrocarbon)	0.0406	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	542	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	542.1189	--

Manufacturer Test Comments COLD CO EXHAUST EC Test No. 20240522TC101

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0176RED		
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 70	CO	0.22	--	--	--	0.04	--	0.3	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 70	HC-NM	0.03	--	--	--	0.0049	--	0.0	0.3	Pass
CA	50,000 miles	California LEV-IV ULEV70	CO	0.22	--	--	--	0.04	--	0.3	12.5	Pass
CA	120,000 miles	California LEV-IV ULEV70	HC-NM	0.03	--	--	--	0.0049	--	0.0	0.3	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX91006032	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	08/30/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4946	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)	510.3653564	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	480.0942993	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	412.1411133	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0036403	--
CO (Carbon Monoxide)	0.1013116	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.4584469	--
DT-EER (Drive Trace Energy Economy Rating)	0.3233213	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.4813809	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0157359	--
N2O (Nitrous Oxide)	0.0003388	--
HC-NM (Non-methane Hydrocarbon)	0.0084616	--
NMOG (Non-methane organic gases)	0.0092999	--
PM (Particulate Matter)	0.0015342	--
HC-TOTAL (Total Hydrocarbon)	0.0115707	--

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	467.6956482	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, FE BAG 3, MFR FE

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 70	METHANE	0.0036	--	--	--	0.0028	--	0.006	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 70	N2O	0.0003	--	--	--	0.0001	--	0.000	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.10	--	--	--	0.04	--	0.1	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO-COMP	0.25	--	--	--	0.04	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0250	--	1.1	--	--	--	0.040	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX-COMP	0.0368	--	1.1	--	0.015	--	0.037	0.080	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0157	--	--	--	0.0096	--	0.025	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0015	--	--	--	0	--	0.002	0.003	Pass
CA	120,000 miles	California LEV-IV ULEV70	METHANE	0.0036	--	--	--	0.0028	--	0.006	0.030	Pass
CA	120,000 miles	California LEV-IV ULEV70	N2O	0.0003	--	--	--	0.0001	--	0.000	0.010	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.10	--	--	--	0.04	--	0.1	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0250	--	1.1	--	--	--	0.040	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0157	--	--	--	0.0096	--	0.025	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	PM	0.0015	--	--	--	0	--	0.002	0.003	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX91006002	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	08/27/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4901	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0004175	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.9626114	--
DT-EER (Drive Trace Energy Economy Rating)	-0.1433483	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.7998407	--
MFR FE (Manufacturer Fuel Economy)	30.0692215	--
NOX (Nitrogen Oxide)	0.0045164	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0001209	--
NMOG (Non-methane organic gases)	0.0001245	--
HC-TOTAL (Total Hydrocarbon)	0.000529	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	289.3394775	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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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 70	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0001	--	1	--	0.0054	--	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0046	--	1	--	--	--	0.020	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0045	--	--	--	0.0096	--	0.014	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0001	--	1	--	0.0054	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0046	--	1	--	--	--	0.020	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0045	--	--	--	0.0096	--	0.014	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX91006001	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	08/27/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4922	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)	709.156189	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	369.4986877	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.004278	--
CO (Carbon Monoxide)	0.3571749	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.4216474	--
DT-EER (Drive Trace Energy Economy Rating)	-2.2741566	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.9886243	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0226176	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0052563	--
NMOG (Non-methane organic gases)	0.0054139	--
PM (Particulate Matter)	0.0034485	--
HC-TOTAL (Total Hydrocarbon)	0.0094374	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	445.0044861	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, MFR FE

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0176RED		
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 70	CO	0.36	--	--	--	0.04	--	0.4	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0054	--	1.03	--	0.0054	--	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0226	--	--	--	0.0096	--	0.032	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0034	--	--	--	0	--	0.003	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.36	--	--	--	0.04	--	0.4	999.9	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0054	--	1.03	--	0.0054	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0280	--	--	--	--	--	0.043	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0226	--	--	--	0.0096	--	0.032	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	PM	0.0034	--	--	--	0	--	0.003	0.006	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX10087046	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	05/17/2024	Fuel	Gasoline
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4315	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0013	--
CO (Carbon Monoxide)	0.2008	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2736	--
DT-EER (Drive Trace Energy Economy Rating)	0.7012	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.0183	--
MFR FE (Manufacturer Fuel Economy)	15.5516	15.5516
NOX (Nitrogen Oxide)	0.0129	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0013	--
NMOG (Non-methane organic gases)	0.0013	--
PM (Particulate Matter)	0.0003	--
HC-TOTAL (Total Hydrocarbon)	0.0025	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	557	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	557.1203	--

Manufacturer Test Comments

SC03 EXHAUST EC Test No. 20240517TC107

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0176RED		
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 70	CO	0.20	--	--	--	0.04	--	0.2	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0013	--	1	--	0.0054	--	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0129	--	--	--	0.0096	--	0.022	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.20	--	--	--	0.04	--	0.2	999.9	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0013	--	1	--	0.0054	--	0.007	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0129	--	--	--	0.0096	--	0.022	999.999	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Emission Data Vehicle Information

Vehicle ID / Configuration	ECFE-9YAGTS-25 / 4	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SPRXT04.0CE8	Original Evaporative/Refueling Family	SPRXR0176RED
Original Test Vehicle Model Year	2025		

Vehicle Model

Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne GTS
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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	Combustion Engine	Gasoline

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.985
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	DWH	Rated Horsepower	493
Displacement (liters)	4	Air Aspiration Method, if 'Other'	
Air Aspiration Method	Turbocharged	Air Aspiration Device Configuration	Parallel
Number of Air Aspiration Devices	2	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)	5500
Curb Weight (lbs)	5148	N/V Ratio	23
GVWR (lbs)	6371		
Axle Ratio	3.21	# of Transmission Gears	8
Transmission Type	Semi-Automatic	Creeper Gear	No
Transmission Lockup	Yes		

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	44.51	0.2978	0.02719	-9.32	0.3477	0.02344	17

Emission Control Device Comments 2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Manufacturer Test Vehicle Comments	FEDV2 VEHICLE, CAYENNE GTS; Internal vehicle ID: SE0743		

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX10087056	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	06/07/2024	Fuel	Gasoline
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4589	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)	480.9108	--
FE BAG 1 (Bag 1 Fuel Economy)	18.4941	18.4941
CO2 BAG 2 (Bag 2 Carbon Dioxide)	479.072	--
FE BAG 2 (Bag 2 Fuel Economy)	18.6184	18.6184
CO2 BAG 3 (Bag 3 Carbon Dioxide)	407.9189	--
FE BAG 3 (Bag 3 Fuel Economy)	21.863	21.863
METHANE (CH4 - Methane)	0.0047	--
CO (Carbon Monoxide)	0.1709	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.2564	--
DT-EER (Drive Trace Energy Economy Rating)	-0.6078	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.9311	--
HCHO (Formaldehyde)	0.0001	--
MFR FE (Manufacturer Fuel Economy)	19.381	19.381
NOX (Nitrogen Oxide)	0.0168	--
HC-NM (Non-methane Hydrocarbon)	0.0091	--
NMOG (Non-methane organic gases)	0.0093	--
HC-TOTAL (Total Hydrocarbon)	0.0137	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	460	460

Certification Summary Information Report

Test Group		VPRXJ04.0CE8		Evaporative/Refueling Family				VPRXR0176RED				
		Test Result Name		Unrounded Test Result		Verify Calculated CO2						
		Carbon dioxide		459.9186		--						
Manufacturer Test Comments		FTP75 FE FEDV2 SUV Test No. 20240607TC203										
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 70	METHANE	0.0047	--	--	--	0.0028	--	0.008	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.17	--	--	--	0.04	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CREE	460	--	--	--	0	--	460	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	HCHO	0.0001	--	--	--	0.0002	--	0.000	0.004	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0261	--	1.1	--	--	--	0.041	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0168	--	--	--	0.0096	--	0.026	999.999	Pass
CA	120,000 miles	California LEV-IV ULEV70	METHANE	0.0047	--	--	--	0.0028	--	0.008	0.030	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.17	--	--	--	0.04	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	HCHO	0.0001	--	--	--	0.0002	--	0.000	0.004	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0261	--	1.1	--	--	--	0.041	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0168	--	--	--	0.0096	--	0.026	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Test #	SPRX10087057	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	06/07/2024	Fuel	Gasoline
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4600	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0003	--
CO (Carbon Monoxide)	0.0017	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.3112	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4422	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.2354	--
HCHO (Formaldehyde)	0	--
MFR FE (Manufacturer Fuel Economy)	30.2378	30.2378
NOX (Nitrogen Oxide)	0.0082	--
HC-NM (Non-methane Hydrocarbon)	0.0006	--
NMOG (Non-methane organic gases)	0.0006	--
HC-TOTAL (Total Hydrocarbon)	0.0008	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	295	295

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	294.9814	--

Manufacturer Test Comments

HWY FE FEDV2 SUV Test No. 20240607TC205

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0176RED		
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 70	CREE	295	--	--	--	0	--	295	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0006	--	1	--	0.0054	--	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0088	--	1	--	--	--	0.024	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0082	--	--	--	0.0096	--	0.018	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0006	--	1	--	0.0054	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0088	--	1	--	--	--	0.024	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0082	--	--	--	0.0096	--	0.018	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Fuel Properties			
Fuel Batch ID	TCC10	Fuel Calibration Number	20
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	08/31/2022
Fuel Batch Calibration Effective Date	08/31/2022	Fuel Batch Calibration Ineffective Date	08/31/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.742
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	29858	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	10/27/2023
Fuel Batch Calibration Effective Date	10/27/2023	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	0.748
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17835
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	10/16/2023
Fuel Batch Calibration Effective Date	10/16/2023	Fuel Batch Calibration Ineffective Date	10/30/2026
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.744
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17725
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.823	Weight Fraction CO2	--
Fuel Batch ID	W22	Fuel Calibration Number	24
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	01/19/2023
Fuel Batch Calibration Effective Date	01/19/2023	Fuel Batch Calibration Ineffective Date	01/31/2028

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.741
Fuel Ethanol Volume Percent (%)	10.1	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17962
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.834	Weight Fraction CO2	--
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	07/13/2023
Fuel Batch Calibration Effective Date	07/13/2023	Fuel Batch Calibration Ineffective Date	07/31/2026
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18429
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	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
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	METHANE	--	--	--	--	--	--	0.0028	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0001	0.010
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	0.04	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.9
150,000 miles	HCHO	--	--	--	--	--	--	0.0002	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	--	0.015	0.070
150,000 miles	NMOG+NOX-COMP	--	--	1.1	--	--	--	0.015	0.080
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0176RED	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70	
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	METHANE	--	--	--	--	--	--	0.0028	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0001	0.010
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7
150,000 miles	HCHO	--	--	--	--	--	--	0.0002	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 70	
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0176RED	
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70	
Fuel		Gasoline			Test Procedure			Fed. fuel 50 F exh.	
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7
150,000 miles	HCHO	--	--	--	--	--	--	0.0001	0.016
150,000 miles	NMOG	--	--	--	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0.015	0.140
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70	
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	--	--	--	--	--	--	0.04	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0049	0.3

Cert Region		Federal			Cert/In-Use Code			Cert	
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 70	
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0054	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.006

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
Fuel	Gasoline	Test Procedure	HWFE

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.006

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
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	--	--	--	--	--	--	0.04	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0049	0.3

Evaporative/Refueling Standards

Evaporative/Refueling Family	VPRXR0176RED	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
Test Procedure	2-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.0108

Evaporative/Refueling Family	VPRXR0176RED	Cert Region	Federal
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap
Test Procedure	Federal fuel refueling test (ORVR)		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.007

Evaporative/Refueling Family	VPRXR0176RED	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
Test Procedure	Evap Canister Bleed Test		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0

Evaporative/Refueling Family	VPRXR0176RED	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)
Cert/In-Use Code	Both	Standard Level	
Test Procedure	Federal fuel 3-day evap		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.014

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED		
Evaporative/Refueling Family	VPRXR0176RED	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
Evaporative/Refueling Family	VPRXR0176RED	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	Federal Fuel Running Loss				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0
Evaporative/Refueling Family	VPRXR0176RED	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	Evap Canister Bleed Test				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0
Evaporative/Refueling Family	VPRXR0176RED	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	2-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.0108
Evaporative/Refueling Family	VPRXR0176RED	Cert Region	Federal		
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap		
Test Procedure	Federal fuel 3-day evap				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.450	0.014

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED		
Evaporative/Refueling Family	VPRXR0176RED	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel refueling test (ORVR)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.007

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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		VPRXJ04.0CE8	Evaporative/Refueling Family		VPRXR0176RED
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	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0176RED
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

Section 7-Test Results

7.04>> CSI Report, Evap Family VPRXR0190RP7

The Certification Summary Information (CSI) report for this Test Group and second Evaporative Family combination begins on the following page.

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7				
Evaporative/Refueling Family Information							
Evaporative Summary Information Type	New	Submission/Correction Date	03/23/2026 03:40:34 PM				
Integrated ORVR?	Yes	Fuel(s)	Gasoline				
Multiple Fuel Storage	--						
Bladder Fuel Tank?	No						
Fuel Tank Material	Plastic	Fuel Tank Material Description	HDPE				
Fill Pipe Seal Type	Liquid seal						
Air Intake System Vapor Storage Device?	No	Air Intake System Vapor Storage Device Description	--				
Fuel System Vapor Storage Canister?	Yes	Other Vapor Storage	--				
Fuel System Vapor Storage Canister(s) Total Working Capacity (grams)	190	Number of Primary Canisters	1				
Number of Bleed Canisters	0	Bleed Canister Total Working Capacity (grams)	--				
Mfr Evaporative/Refueling Family Comments	Evap system for all Panamera models (non-hybrids)						
Leak Family Details							
Leak Family Indicator	No						
Canister Bleed Test Indicator	Yes	Applicability of Evaporative Canister Bleed Test	50 State				
Evaporative Canister Bleed Test Comments	--						
CARB Fuel Only (Rig) Test Indicator	No	Applicability of CARB Fuel Only (Rig) Test	--				
CARB Fuel Only (Rig) Test Comments	--						
Models Covered by this Certificate							
Carline Manufacturer	Division	Carline	Certification Region Code(s)	Drive System	Trans - Type	- # of Gears	Trans - Lockup
Porsche AG	1 - Porsche	610 - Panamera GTS	California + CAA Section 177 states	All Wheel Drive	Automated Manual- Selectable (e.g. Automated Manual with paddles)	8	No
Porsche AG	1 - Porsche	610 - Panamera GTS	Federal	All Wheel Drive	Automated Manual- Selectable (e.g. Automated Manual with paddles)	8	No
Engine Description							
Hybrid Type	--	Hybrid Description	--				
Engine Type	4-Stroke Spark Ignition	Mfr Engine Description	--				
Engine Block Arrangement	V-shaped engine	Mfr Engine Block Arrangement Description	--				
Camless Valvetrain Indicator	No	Oil Viscosity/Classification	0W40				
Number of Cylinders/Rotors	8	Mechanically Variable Compression Ratio Indicator	N				

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7	
After Treatment Device(s) (ATD)				
ATD Number	ATD Type	ATD Precious Metal	Substrate Material	Substrate Construction
1	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith
2	Three-way catalyst	Palladium + Rhodium	Ceramic	Monolith
Mfr After Treatment Device (ATD) Comments				
--				
Direct Ozone Reduction (DOR) Device				
Not Equipped				
Mfr Emission Control Device Comments				
2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC				
Engine Configuration Number 1				
Engine Displacement (liters)	4.0	Engine Rated Horsepower	493	
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2	
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2	
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air	
Air Aspiration Drive Method(s)	Mechanical			
Cylinder Deactivation	No			
Cylinder Deactivation Description	--			
Variable Valve Timing	Yes			
Variable Valve Timing System Description	VarioCam			
Variable Valve Lift?	Yes			
Variable Valve Lift System Description	VarioCam Plus			
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4	
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--	
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--	
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--	
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--	
Mfr Air/Fuel Sensor Comments	--			
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No	
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--	
Closed Loop Air Injection System	No			
Air Injection Type	--	Air Injection Type if 'Other'	--	
Mfr Engine Configuration Comments	Cayenne GTS Models - 2TWC/DFI/2WR-HO2S/2HO2S/2TC/2CAC			

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Engine Configuration Number 2			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	468
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	VarioCam		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	VarioCam Plus		
Number of Knock Sensors	2	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	No
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	No		
Air Injection Type	--	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Cayenne S Models - 2TWC/DFI/2WR-HO2S/2HO2S/2TC/2CAC		

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Engine Configuration Number 3			
Engine Displacement (liters)	4.0	Engine Rated Horsepower	493
Number of Inlet Valves Per Cylinder	2	Number of Exhaust Valves Per Cylinder	2
Air Aspiration Method	Turbocharged	Number of Air Aspiration Devices	2
Air Aspiration Device Configuration	Parallel	Charge Air Cooler Type	Air
Air Aspiration Drive Method(s)	Mechanical		
Cylinder Deactivation	No		
Cylinder Deactivation Description	--		
Variable Valve Timing	Yes		
Variable Valve Timing System Description	VarioCam		
Variable Valve Lift?	Yes		
Variable Valve Lift System Description	VarioCam Plus		
Number of Knock Sensors	4	Number of Air/Fuel Sensors	4
Air/Fuel Sensor # 1 Type	Heated oxygen	Air/Fuel Sensor # 1 Description	--
Air/Fuel Sensor # 2 Type	Heated oxygen	Air/Fuel Sensor # 2 Description	--
Air/Fuel Sensor # 3 Type	Heated oxygen	Air/Fuel Sensor # 3 Description	--
Air/Fuel Sensor # 4 Type	Heated oxygen	Air/Fuel Sensor # 4 Description	--
Mfr Air/Fuel Sensor Comments	--		
Exhaust Gas Recirculation	No	Cooled Exhaust Gas Recirculation	--
EGR Type	--	Exhaust Gas Recirculation Description if 'Other'	--
Closed Loop Air Injection System	--		
Air Injection Type	--	Air Injection Type if 'Other'	--
Mfr Engine Configuration Comments	Panamera GTS Models - 2TWC(2)/DFI/2WR-HO2S/2HO2S/2TC/2CAC		

Official Test Numbers

Test Group	Fuel	FTP	US06	SC03	Cold CO	Highway	EPA City Litmus Value	EPA City Litmus Threshold	EPA Highway Litmus Value	EPA Highway Litmus Threshold	CREE Weighting Factor
Gasoline		SPRX91006032	SPRX91006001	SPRX10087046	SPRX10087048	SPRX91006002	--	228.2	--	286.1	--

SFTP LEV-III Official Test Numbers

Test Group Fuel	FTP	US06	SC03
Gasoline	SPRX91006032	SPRX91006001	SPRX10087046

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7						
Emission Data Vehicle Information									
Vehicle ID / Configuration	ECFE-9YAGTS-25 / 0	Manufacturer Vehicle Configuration Number	0						
Original Test Group Name	SPRXT04.0CE8	Original Evaporative/Refueling Family	SPRXR0176RED						
Original Test Vehicle Model Year	2025								
Vehicle Model									
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne GTS Coupe						
Leak Family Details									
Leak Family Identifier	--	Leak Family Name	--						
Drive Sources and Fuel System Details									
	<table border="1"> <thead> <tr> <th>Drive Source and Fuel#</th> <th>Drive Source</th> <th>Fuel</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Combustion Engine</td> <td>Gasoline</td> </tr> </tbody> </table>			Drive Source and Fuel#	Drive Source	Fuel	1	Combustion Engine	Gasoline
Drive Source and Fuel#	Drive Source	Fuel							
1	Combustion Engine	Gasoline							
Hybrid Indicator	No								
Multiple Fuel Storage	--	Multiple Fuel Combustion	--						
Fuel Cell Indicator	--	Rechargeable Energy Storage System Indicator	--						
Rechargeable Energy Storage System	--	Rechargeable Energy Storage System, if 'Other'	--						
Off-board charge Capable Indicator	--								
Odometer Correction -- Initial	0	Odometer Correction Factor	0.985						
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles								
Odometer Correction Units	Miles								
Engine Code	DWH	Rated Horsepower	493						
Displacement (liters)	4								
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'							
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel						
Charge Air Cooler Type	Air	Drive Mode While Testing	All Wheel Drive						
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)						
Curb Weight (lbs)	5108	Equivalent Test Weight (pounds)	5500						
GVWR (lbs)	6371	N/V Ratio	23						
Axle Ratio	3.21								
Transmission Type	Semi-Automatic	# of Transmission Gears	8						
Transmission Lockup	Yes	Creeper Gear	No						

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0190RP7
Dynamometer Coefficients:								
		Target Coefficients			Set Coefficients			EPA Calculated Total Road Load Horse Power for City/Highway/Evap Coefficients
Coefficient Category	A (lbf)	B (lbf/mph)	C (lbf/mph**2)	A (lbf)	B (lbf/mph)	C (lbf/mph**2)		
City/Highway/Evap	42.2	0.4877	0.02479	-6.97	0.4608	0.02181	17.1	
Cold CO	46.42	0.5365	0.02727	-20.72	0.4145	0.02465	N/A	
US06	42.2	0.4877	0.02479	-6.97	0.4608	0.02181	N/A	
Emission Control Device Comments	2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC							
Manufacturer Test Vehicle Comments	EXHAUST EMISSIONS VEHICLE, CAYENNE GTS COUPE; Internal vehicle ID: SE0743; CITY/HWY/US06 TARGET A COEFFICIENT: 42.20							

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX10087047	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	05/21/2024	Fuel	Gasoline
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4330	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)	527.4971	--
FE BAG 1 (Bag 1 Fuel Economy)	16.4086	16.4086
CO2 BAG 2 (Bag 2 Carbon Dioxide)	481.6911	--
FE BAG 2 (Bag 2 Fuel Economy)	17.9968	17.9968
CO2 BAG 3 (Bag 3 Carbon Dioxide)	411.3918	--
FE BAG 3 (Bag 3 Fuel Economy)	21.0669	21.0669
METHANE (CH4 - Methane)	0.0037	--
CO (Carbon Monoxide)	0.1063	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.532	--
DT-EER (Drive Trace Energy Economy Rating)	-0.0616	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.3942	--
MFR FE (Manufacturer Fuel Economy)	18.3652	18.3652
NOX (Nitrogen Oxide)	0.0125	--
N2O (Nitrous Oxide)	0.0006	--
HC-NM (Non-methane Hydrocarbon)	0.0105	--
NMOG (Non-methane organic gases)	0.0115	--
PM (Particulate Matter)	0.0017	--
HC-TOTAL (Total Hydrocarbon)	0.0141	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	472	--

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	471.8305	--

Manufacturer Test Comments 50F EXHAUST EC Test No. 20240521TC101

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	150,000 miles	California LEV-IV ULEV70	CO	0.11	--	--	--	0.04	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0115	--	--	--	0.0054	--	0.017	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0240	--	--	--	--	--	0.039	0.140	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0125	--	--	--	0.0096	--	0.022	999.999	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX10087048	Test Procedure	11 - Cold CO
Exhaust Test # for this Evap Test	--	Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)
Test Date	05/22/2024	Fuel	Gasoline
Fuel Batch ID	TCC10	Fuel Calibration Number	20
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4401	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0072	--
CO (Carbon Monoxide)	0.2183	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.2751	--
DT-EER (Drive Trace Energy Economy Rating)	-0.5662	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.9686	--
MFR FE (Manufacturer Fuel Economy)	15.9043	15.9043
NOX (Nitrogen Oxide)	0.0491	--
N2O (Nitrous Oxide)	0.0008	--
HC-NM (Non-methane Hydrocarbon)	0.0336	--
NMOG (Non-methane organic gases)	0.0369	--
HC-TOTAL (Total Hydrocarbon)	0.0406	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	542	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	542.1189	--

Manufacturer Test Comments COLD CO EXHAUST EC Test No. 20240522TC101

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0190RP7		
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 70	CO	0.22	--	--	--	0.04	--	0.3	12.5	Pass
Fed	120,000 miles	Federal Tier 3 Bin 70	HC-NM	0.03	--	--	--	0.0049	--	0.0	0.3	Pass
CA	50,000 miles	California LEV-IV ULEV70	CO	0.22	--	--	--	0.04	--	0.3	12.5	Pass
CA	120,000 miles	California LEV-IV ULEV70	HC-NM	0.03	--	--	--	0.0049	--	0.0	0.3	Pass

Certification Summary Information Report

Test Group	VPRXJ04.OCE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX91006032	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	08/30/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4946	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)	510.3653564	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	480.0942993	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
CO2 BAG 3 (Bag 3 Carbon Dioxide)	412.1411133	--
FE BAG 3 (Bag 3 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.0036403	--
CO (Carbon Monoxide)	0.1013116	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	1.4584469	--
DT-EER (Drive Trace Energy Economy Rating)	0.3233213	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	1.4813809	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0157359	--
N2O (Nitrous Oxide)	0.0003388	--
HC-NM (Non-methane Hydrocarbon)	0.0084616	--
NMOG (Non-methane organic gases)	0.0092999	--
PM (Particulate Matter)	0.0015342	--
HC-TOTAL (Total Hydrocarbon)	0.0115707	--

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	467.6956482	--

Manufacturer Test Comments None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, FE BAG 3, MFR FE

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 70	METHANE	0.0036	--	--	--	0.0028	--	0.006	0.030	Pass
Fed	120,000 miles	Federal Tier 3 Bin 70	N2O	0.0003	--	--	--	0.0001	--	0.000	0.010	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.10	--	--	--	0.04	--	0.1	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO-COMP	0.25	--	--	--	0.04	--	0.2	4.2	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0250	--	1.1	--	--	--	0.040	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX-COMP	0.0368	--	1.1	--	0.015	--	0.037	0.080	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0157	--	--	--	0.0096	--	0.025	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0015	--	--	--	0	--	0.002	0.003	Pass
CA	120,000 miles	California LEV-IV ULEV70	METHANE	0.0036	--	--	--	0.0028	--	0.006	0.030	Pass
CA	120,000 miles	California LEV-IV ULEV70	N2O	0.0003	--	--	--	0.0001	--	0.000	0.010	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.10	--	--	--	0.04	--	0.1	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0250	--	1.1	--	--	--	0.040	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0157	--	--	--	0.0096	--	0.025	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	PM	0.0015	--	--	--	0	--	0.002	0.003	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX91006002	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	08/27/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4901	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0004175	--
CO (Carbon Monoxide)	0	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	2.9626114	--
DT-EER (Drive Trace Energy Economy Rating)	-0.1433483	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	3.7998407	--
MFR FE (Manufacturer Fuel Economy)	30.0692215	--
NOX (Nitrogen Oxide)	0.0045164	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0001209	--
NMOG (Non-methane organic gases)	0.0001245	--
HC-TOTAL (Total Hydrocarbon)	0.000529	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	9999.9999999	999

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	289.3394775	--

Manufacturer Test Comments None

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0190RP7		
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 70	CREE	999	--	--	--	0	--	999	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0001	--	1	--	0.0054	--	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0046	--	1	--	--	--	0.020	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0045	--	--	--	0.0096	--	0.014	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0001	--	1	--	0.0054	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0046	--	1	--	--	--	0.020	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0045	--	--	--	0.0096	--	0.014	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX91006001	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	08/27/2024	Fuel	Gasoline
Fuel Batch ID	29858	Fuel Calibration Number	1
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	--		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4922	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)	709.156189	--
FE BAG 1 (Bag 1 Fuel Economy)	999	--
CO2 BAG 2 (Bag 2 Carbon Dioxide)	369.4986877	--
FE BAG 2 (Bag 2 Fuel Economy)	999	--
METHANE (CH4 - Methane)	0.004278	--
CO (Carbon Monoxide)	0.3571749	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.4216474	--
DT-EER (Drive Trace Energy Economy Rating)	-2.2741566	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-2.9886243	--
MFR FE (Manufacturer Fuel Economy)	999	--
NOX (Nitrogen Oxide)	0.0226176	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0052563	--
NMOG (Non-methane organic gases)	0.0054139	--
PM (Particulate Matter)	0.0034485	--
HC-TOTAL (Total Hydrocarbon)	0.0094374	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	445.0044861	--

Manufacturer Test Comments

None Unrounded Result for the following test results were modified by Verify: FE BAG 2, FE BAG 1, MFR FE

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0190RP7		
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 70	CO	0.36	--	--	--	0.04	--	0.4	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0054	--	1.03	--	0.0054	--	0.011	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0226	--	--	--	0.0096	--	0.032	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	PM	0.0034	--	--	--	0	--	0.003	0.006	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.36	--	--	--	0.04	--	0.4	999.9	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0054	--	1.03	--	0.0054	--	0.011	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0280	--	--	--	--	--	0.043	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0226	--	--	--	0.0096	--	0.032	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	PM	0.0034	--	--	--	0	--	0.003	0.006	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX10087046	Test Procedure	95 - SC03
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	05/17/2024	Fuel	Gasoline
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4315	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0013	--
CO (Carbon Monoxide)	0.2008	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	0.2736	--
DT-EER (Drive Trace Energy Economy Rating)	0.7012	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	0.0183	--
MFR FE (Manufacturer Fuel Economy)	15.5516	15.5516
NOX (Nitrogen Oxide)	0.0129	--
N2O (Nitrous Oxide)	0	--
HC-NM (Non-methane Hydrocarbon)	0.0013	--
NMOG (Non-methane organic gases)	0.0013	--
PM (Particulate Matter)	0.0003	--
HC-TOTAL (Total Hydrocarbon)	0.0025	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	557	--

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	557.1203	--

Manufacturer Test Comments SC03 EXHAUST EC Test No. 20240517TC107

Certification Summary Information Report

Test Group		VPRXJ04.0CE8				Evaporative/Refueling Family				VPRXR0190RP7		
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 70	CO	0.20	--	--	--	0.04	--	0.2	999.9	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0013	--	1	--	0.0054	--	0.007	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0129	--	--	--	0.0096	--	0.022	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.20	--	--	--	0.04	--	0.2	999.9	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0013	--	1	--	0.0054	--	0.007	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0129	--	--	--	0.0096	--	0.022	999.999	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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Emission Data Vehicle Information

Vehicle ID / Configuration	ECFE-9YAGTS-25 / 4	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	SPRXT04.0CE8	Original Evaporative/Refueling Family	SPRXR0176RED
Original Test Vehicle Model Year	2025		
Vehicle Model			
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Cayenne GTS

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	Combustion Engine	Gasoline

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.985
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	DWH	Rated Horsepower	493
Displacement (liters)	4	Air Aspiration Method, if 'Other'	
Air Aspiration Method	Turbocharged	Air Aspiration Device Configuration	Parallel
Number of Air Aspiration Devices	2	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)	5500
Curb Weight (lbs)	5148	N/V Ratio	23
GVWR (lbs)	6371		
Axle Ratio	3.21	# of Transmission Gears	8
Transmission Type	Semi-Automatic	Creeper Gear	No
Transmission Lockup	Yes		

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	44.51	0.2978	0.02719	-9.32	0.3477	0.02344	17

Emission Control Device Comments 2TWC/MAP/DFI/2WR-HO2S/2HO2S/2TC/2CAC

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Manufacturer Test Vehicle Comments	FEDV2 VEHICLE, CAYENNE GTS; Internal vehicle ID: SE0743		

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX10087056	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	06/07/2024	Fuel	Gasoline
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4589	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)	480.9108	--
FE BAG 1 (Bag 1 Fuel Economy)	18.4941	18.4941
CO2 BAG 2 (Bag 2 Carbon Dioxide)	479.072	--
FE BAG 2 (Bag 2 Fuel Economy)	18.6184	18.6184
CO2 BAG 3 (Bag 3 Carbon Dioxide)	407.9189	--
FE BAG 3 (Bag 3 Fuel Economy)	21.863	21.863
METHANE (CH4 - Methane)	0.0047	--
CO (Carbon Monoxide)	0.1709	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-1.2564	--
DT-EER (Drive Trace Energy Economy Rating)	-0.6078	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-1.9311	--
HCHO (Formaldehyde)	0.0001	--
MFR FE (Manufacturer Fuel Economy)	19.381	19.381
NOX (Nitrogen Oxide)	0.0168	--
HC-NM (Non-methane Hydrocarbon)	0.0091	--
NMOG (Non-methane organic gases)	0.0093	--
HC-TOTAL (Total Hydrocarbon)	0.0137	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	460	460

Certification Summary Information Report

Test Group		VPRXJ04.0CE8		Evaporative/Refueling Family				VPRXR0190RP7				
Test Result Name		Unrounded Test Result		Verify Calculated CO2								
Carbon dioxide		459.9186		--								
Manufacturer Test Comments		FTP75 FE FEDV2 SUV Test No. 20240607TC203										
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 70	METHANE	0.0047	--	--	--	0.0028	--	0.008	0.030	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CO	0.17	--	--	--	0.04	--	0.2	1.7	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	CREE	460	--	--	--	0	--	460	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	HCHO	0.0001	--	--	--	0.0002	--	0.000	0.004	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0261	--	1.1	--	--	--	0.041	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0168	--	--	--	0.0096	--	0.026	999.999	Pass
CA	120,000 miles	California LEV-IV ULEV70	METHANE	0.0047	--	--	--	0.0028	--	0.008	0.030	Pass
CA	150,000 miles	California LEV-IV ULEV70	CO	0.17	--	--	--	0.04	--	0.2	1.7	Pass
CA	150,000 miles	California LEV-IV ULEV70	HCHO	0.0001	--	--	--	0.0002	--	0.000	0.004	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0093	--	1.1	--	0.0054	--	0.015	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0261	--	1.1	--	--	--	0.041	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0168	--	--	--	0.0096	--	0.026	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	SPRX10087057	Test Procedure	3 - HWFE
Exhaust Test # for this Evap Test	--	Test Fuel Type	61 - Tier 2 Cert Gasoline
Test Date	06/07/2024	Fuel	Gasoline
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	DF Type	Mfr. Determined
Verify Test Lab ID	VW Test Center California		
E10 Evaporative Test Measurement Method	--		
Test Start Odometer Reading	4600	Odometer Units	M
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
METHANE (CH4 - Methane)	0.0003	--
CO (Carbon Monoxide)	0.0017	--
DT-ASCR (Drive Trace Absolute Speed Change Rating)	-0.3112	--
DT-EER (Drive Trace Energy Economy Rating)	-0.4422	--
DT-IWRR (Drive Trace Inertia Work Ratio Rating)	-0.2354	--
HCHO (Formaldehyde)	0	--
MFR FE (Manufacturer Fuel Economy)	30.2378	30.2378
NOX (Nitrogen Oxide)	0.0082	--
HC-NM (Non-methane Hydrocarbon)	0.0006	--
NMOG (Non-methane organic gases)	0.0006	--
HC-TOTAL (Total Hydrocarbon)	0.0008	--

Test Result Name	Unrounded Test Result	Verify Calculated CREE/OPT-CREE
Carbon-Related Exhaust Emissions	295	295

Test Result Name	Unrounded Test Result	Verify Calculated CO2
Carbon dioxide	294.9814	--

Manufacturer Test Comments

HWY FE FEDV2 SUV Test No. 20240607TC205

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family					VPRXR0190RP7		
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 70	CREE	295	--	--	--	0	--	295	--	--
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG	0.0006	--	1	--	0.0054	--	0.006	999.999	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NMOG+NOX	0.0088	--	1	--	--	--	0.024	0.070	Pass
Fed	150,000 miles	Federal Tier 3 Bin 70	NOX	0.0082	--	--	--	0.0096	--	0.018	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG	0.0006	--	1	--	0.0054	--	0.006	999.999	Pass
CA	150,000 miles	California LEV-IV ULEV70	NMOG+NOX	0.0088	--	1	--	--	--	0.024	0.070	Pass
CA	150,000 miles	California LEV-IV ULEV70	NOX	0.0082	--	--	--	0.0096	--	0.018	999.999	Pass

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

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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Emission Data Vehicle Information

Vehicle ID / Configuration	FE-972-AT-24 / 0	Manufacturer Vehicle Configuration Number	0
Original Test Group Name	RPRXV02.9PV6	Original Evaporative/Refueling Family	RPRXR0190RP7
Original Test Vehicle Model Year	2024		
Vehicle Model			
Represented Test Vehicle Make	Porsche	Represented Test Vehicle Model	Panamera

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	Combustion Engine	Gasoline

Hybrid Indicator	No	Multiple Fuel Combustion	--
Multiple Fuel Storage	--	Rechargeable Energy Storage System Indicator	--
Fuel Cell Indicator	--	Rechargeable Energy Storage System, if 'Other'	--
Rechargeable Energy Storage System	--		
Off-board charge Capable Indicator	--		
Odometer Correction -- Initial	0	Odometer Correction Factor	0.974
Odometer Correction Sign	+ = System Miles is equal to (Test odometer reading * Correction factor) + Initial system miles		
Odometer Correction Units	Miles		
Engine Code	CSZ	Rated Horsepower	348
Displacement (liters)	2.9		
Air Aspiration Method	Turbocharged	Air Aspiration Method, if 'Other'	
Number of Air Aspiration Devices	2	Air Aspiration Device Configuration	Parallel
Charge Air Cooler Type	Air	Drive Mode While Testing	2-Wheel Drive, Rear
Shift Indicator Light Usage	Not equipped	Aged Emission Components	4,000 (mi)
Curb Weight (lbs)	4389	Equivalent Test Weight (pounds)	4750
GVWR (lbs)	5523	N/V Ratio	21.9
Axle Ratio	3.36		
Transmission Type	Automated Manual- Selectable (e.g. Automated Manual with paddles)	# of Transmission Gears	8
Transmission Lockup	No	Creep Gear	No

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	37.453	0.53329	0.018999	22.609	0.28745	0.019546	14.9

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Emission Control Device Comments	--		
Manufacturer Test Vehicle Comments	EVAP for Panamera; Internal vehicle ID: SE0112		
Test #	RPRX10082417	Test Procedure	23 - 2-day evap
Exhaust Test # for this Evap Test	RPRX10082411	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/04/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	6990	Odometer Units	K
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--		
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)	Road Speed Fan Usage	Yes

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2384	--

Manufacturer Test Comments PANAMERA 2DD EVAP Test No. 23050183

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	0.2384	0.0000	0.238	0.300	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2384	0.0000	0.238	0.300	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	RPRX10082438	Test Procedure	34 - Federal fuel 3-day evap
Exhaust Test # for this Evap Test	RPRX10082437	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/18/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	7080	Odometer Units	K
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	Yes
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.2326	--

Manufacturer Test Comments

PANAMERA 3DD EVAP Test No. 23049159

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	0.2326	0.0000	0.233	0.300	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.2326	0.0000	0.233	0.300	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	RPRX10082434	Test Procedure	24 - Federal fuel refueling test (ORVR)
Exhaust Test # for this Evap Test	RPRX10082418	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/02/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	6929	Odometer Units	K
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	Yes
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC (Hydrocarbon for Running Loss and ORVR)	0.0144	--

Manufacturer Test Comments

PANAMERA ORVR EVAP Test No. 23047326

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC	0.014	0.001	0.02	0.20	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC	0.014	0.001	0.02	0.20	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	RPRX10082462	Test Procedure	32 - Federal Fuel Running Loss
Exhaust Test # for this Evap Test	RPRX10082437	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/18/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	7051	Odometer Units	K
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	--
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value (miles per gallon)
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0	--

Manufacturer Test Comments PANAMERA RUNNING LOSS EVAP Test No. 23051648

Certification Region	Useful Life	Standard Level	Emission Name	Rounded Result	Add DF	Certification Level	Standard	Pass/Fail
Fed	150,000 miles	Federal Tier 3 Evap	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.05	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.000	0.000	0.00	0.05	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Test #	RPRX10082495	Test Procedure	65 - Evap Canister Bleed Test
Exhaust Test # for this Evap Test	--	Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)
Test Date	08/24/2023	Fuel	Gasoline
Fuel Batch ID	W22	Fuel Calibration Number	24
Vehicle Class	N/A	DF Type	Mfr. Determined
Verify Test Lab ID	Porsche AG, Labs and Engineering		
E10 Evaporative Test Measurement Method	Actual Total Hydrocarbon Equivalent Measurement (with speciation)		
Test Start Odometer Reading	7093	Odometer Units	K
4WD Test Dyno	Yes	Diesel Adjustment Factor Usage	--
State of Charge Delta	--	Road Speed Fan Usage	--
Drive Cycle Speed Tolerance Criteria	Used Part 1066 (+/- 2.0 mph, +/- 1.0 sec)		

Test Results

Test Result Name	Unrounded Test Result	Verify Calculated FE Equivalent Value
HC-TOTAL-EQUIV (Total Hydrocarbon equivalent - Evap only)	0.013638	--

Manufacturer Test Comments PANAMERA BETP EVAP Test No. 23049405

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	0.0136	0.0000	0.014	0.020	Pass
CA	150,000 miles	California LEV-IV Zero Evap (Option 2)	HC-TOTAL-EQUIV	0.0136	0.0000	0.014	0.020	Pass

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Fuel Properties			
Fuel Batch ID	TCC10	Fuel Calibration Number	20
Test Fuel Type	29 - Cold CO E10 Premium Gasoline (Tier 3)	Fuel Batch Calibration Date	08/31/2022
Fuel Batch Calibration Effective Date	08/31/2022	Fuel Batch Calibration Ineffective Date	08/31/2025
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.742
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	29858	Fuel Calibration Number	1
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	10/27/2023
Fuel Batch Calibration Effective Date	10/27/2023	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	0.748
Fuel Ethanol Volume Percent (%)	9.7	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17835
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.827	Weight Fraction CO2	--
Fuel Batch ID	HF2042	Fuel Calibration Number	437
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	10/16/2023
Fuel Batch Calibration Effective Date	10/16/2023	Fuel Batch Calibration Ineffective Date	10/30/2026
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.744
Fuel Ethanol Volume Percent (%)	9.9	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17725
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.823	Weight Fraction CO2	--
Fuel Batch ID	W22	Fuel Calibration Number	24
Test Fuel Type	49 - Tier 3 E10 Premium Gasoline (9 RVP @Low Alt.)	Fuel Batch Calibration Date	01/19/2023
Fuel Batch Calibration Effective Date	01/19/2023	Fuel Batch Calibration Ineffective Date	01/31/2028

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.741
Fuel Ethanol Volume Percent (%)	10.1	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	17962
Fuel Net Heat of Combustion (E10) (MJ/kg)	--	Fuel Carbon Mass Fraction (E10)	--
Fuel Blend Carbon Weight Fraction / Fuel Carbon Mass Fraction (E0)	0.834	Weight Fraction CO2	--
Fuel Batch ID	HF0437	Fuel Calibration Number	513
Test Fuel Type	61 - Tier 2 Cert Gasoline	Fuel Batch Calibration Date	07/13/2023
Fuel Batch Calibration Effective Date	07/13/2023	Fuel Batch Calibration Ineffective Date	07/31/2026
Carbon Weight Fraction NMHC	--	Carbon Weight Fraction HC	--
Exhaust Carbon Weight Fraction	--	Fuel Methanol Volume Fraction	--
Fuel Density (grams/cubic ft)	--	Fuel Specific Gravity	0.743
Fuel Ethanol Volume Percent (%)	--	Fuel Net Heating Value / Fuel Net Heat of Combustion (E0) (BTU/lb)	18429
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	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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Consolidated List of Standards

Exhaust Standards

Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
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	METHANE	--	--	--	--	--	--	0.0028	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0001	0.010
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7
150,000 miles	CO-COMP	--	--	--	--	--	--	0.04	4.2
150,000 miles	CREE	--	--	--	--	--	--	0	999.9
150,000 miles	HCHO	--	--	--	--	--	--	0.0002	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	--	0.015	0.070
150,000 miles	NMOG+NOX-COMP	--	--	1.1	--	--	--	0.015	0.080
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0190RP7		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70		
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	METHANE	--	--	--	--	--	--	0.0028	0.030
120,000 miles	N2O	--	--	--	--	--	--	0.0001	0.010
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7
150,000 miles	HCHO	--	--	--	--	--	--	0.0002	0.004
150,000 miles	NMOG	--	--	1.1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1.1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.003

Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 70		
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Certification Summary Information Report

Test Group		VPRXJ04.0CE8			Evaporative/Refueling Family			VPRXR0190RP7		
Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70		
Fuel		Gasoline			Test Procedure			Fed. fuel 50 F exh.		
Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std	
150,000 miles	CO	--	--	--	--	--	--	0.04	1.7	
150,000 miles	HCHO	--	--	--	--	--	--	0.0001	0.016	
150,000 miles	NMOG	--	--	--	--	--	--	0.0054	999.999	
150,000 miles	NMOG+NOX	--	--	--	--	--	--	0.015	0.140	
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999	

Cert Region		California + CAA Section 177 states			Cert/In-Use Code			Cert		
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			California LEV-IV ULEV70		
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	--	--	--	--	--	--	0.04	12.5	
120,000 miles	HC-NM	--	--	--	--	--	--	0.0049	0.3	

Cert Region		Federal			Cert/In-Use Code			Cert		
Vehicle Class		LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)			Standard Level			Federal Tier 3 Bin 70		
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	--	--	--	--	--	--	0.04	999.9	
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0054	999.999	
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999	
150,000 miles	PM	--	--	--	--	--	--	0	0.006	

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
Fuel	Gasoline	Test Procedure	HWFE

Useful Life	Emission Name	Rounded Result	RAF	NMOG / NMHC	Upward Diesel Adjustment Factor	Downward Diesel Adjustment Factor	Mult DF	Add DF	Std
150,000 miles	CREE	--	--	--	--	--	--	0	999.9
150,000 miles	NMOG	--	--	1	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	1	--	--	--	0.015	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999

Cert Region	California + CAA Section 177 states	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	California LEV-IV ULEV70
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	--	--	--	--	--	--	0.04	999.9
150,000 miles	NMOG	--	--	1.03	--	--	--	0.0054	999.999
150,000 miles	NMOG+NOX	--	--	--	--	--	1	--	0.070
150,000 miles	NOX	--	--	--	--	--	--	0.0096	999.999
150,000 miles	PM	--	--	--	--	--	--	0	0.006

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
Cert Region	Federal	Cert/In-Use Code	Cert
Vehicle Class	LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000)	Standard Level	Federal Tier 3 Bin 70
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	--	--	--	--	--	--	0.04	12.5
120,000 miles	HC-NM	--	--	--	--	--	--	0.0049	0.3

Evaporative/Refueling Standards

Evaporative/Refueling Family	VPRXR0190RP7	Cert Region	Federal
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap
Test Procedure	Federal Fuel Running Loss		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.05	0.000

Evaporative/Refueling Family	VPRXR0190RP7	Cert Region	Federal
Cert/In-Use Code	Both	Standard Level	Federal Tier 3 Evap
Test Procedure	Evap Canister Bleed Test		

Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0.0000

Evaporative/Refueling Family	VPRXR0190RP7	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	--	0.300	0.0000

Evaporative/Refueling Family	VPRXR0190RP7	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	--	0.300	0.0000

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7		
Evaporative/Refueling Family	VPRXR0190RP7	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	--	0.300	0.0000
Evaporative/Refueling Family	VPRXR0190RP7	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel refueling test (ORVR)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.001
Evaporative/Refueling Family	VPRXR0190RP7	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	VPRXR0190RP7	Cert Region	California + CAA Section 177 states California LEV-IV Zero Evap (Option 2)		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Evap Canister Bleed Test				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC-TOTAL-EQUIV	--	0.020	0.0000
Evaporative/Refueling Family	VPRXR0190RP7	Cert Region	Federal Federal Tier 3 Evap		
Cert/In-Use Code	Both	Standard Level			
Test Procedure	Federal fuel refueling test (ORVR)				
Fuel	Useful Life	Emission Name	Rounded Result	Std	Add DF
Gasoline	150,000 miles	HC	--	0.20	0.001

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7		
Evaporative/Refueling Family	VPRXR0190RP7	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	--	0.300	0.0000

Certification Summary Information Report

Test Group	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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		VPRXJ04.0CE8	Evaporative/Refueling Family		VPRXR0190RP7
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		VPRXJ04.0CE8	Evaporative/Refueling Family		VPRXR0190RP7
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	VPRXJ04.0CE8	Evaporative/Refueling Family	VPRXR0190RP7
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

Section 8~Manufacturer Statements

8.01>> Emission Testing Waiver Statements

Fuel Spitback	In accordance with 40 CFR 86.1829-15(e)(5), Porsche hereby certifies that the vehicles covered by this test group inherently meet the fuel dispensing spitback standard for the full useful life of the vehicles as part of compliance with the refueling emissions standard.
Total Hydrocarbon	In accordance with 40 CFR 86.1829-15(c), Porsche hereby certifies that, based upon good engineering judgment and previous emissions testing, vehicles of this test group comply with applicable total hydrocarbon emissions standards.
Formaldehyde Emissions	Based on prior emissions testing, as allowed by 40 CFR 86.1829-15(e)(5), Porsche attests that vehicles in this test group comply with applicable formaldehyde standards.
Particulate Matter	For vehicles in test groups certified to Tier-4 standards, Porsche hereby certifies, in accordance with 40 CFR 86.1829-15(d)(9), that the vehicles of this test group comply with the Particulate Matter standard for -7 °C.
N2O Compliance	Porsche has elected not to include N2O in its GHG fleet averaging calculations. Compliance with the N2O standards on the FTP cycle is indicated in the CSI report(s) in Section 7.
CH4 Compliance	Porsche has elected not to include CH4 in its GHG fleet averaging calculations. Compliance with the CH4 standards on the FTP cycle is indicated in the CSI report(s) in Section 7.
FTP High Altitude Compliance and Strategies	In accordance with 40 CFR 86.1829-15 (c), Porsche attests that emissions control strategies used at low altitude are similarly used across all altitudes, and that the vehicles in this test group comply with all applicable emissions standards at high altitude.
Evaporative / Refueling Emissions Testing at High Altitude	In accordance with 40 CFR 86.1829-01 (b) (2) (ii) (B), Porsche certifies that, based upon good engineering judgment and appropriate emissions tests, vehicles of this test group comply with applicable evaporative/refueling emissions standards at high altitude.
OBD Performance Warranty Test	Porsche attests that the emission control diagnostic system for all vehicles in this test group comply with all the performance warranty test requirements of 40 CFR 86.1844-01(d)(9)(iv).
Testing of Configurations	The worst-case configuration has been verified by development testing. At the final stages of development testing Porsche ensures all tested configurations and sub-configurations meet criteria pollutant standards.
Transmission modes, and other modes	Porsche vehicles typically have multiple driver-selectable driving / transmission modes, such as "Sport" and "Sport Plus", which can be driven over emission test cycles. Porsche evaluates emission performance to ensure all modes meet emissions standards. These modes, and other modes that may adapt to real-world driving conditions, such as "Towing" and "Off-Road", in that they may initiate alternate transmission scheduling and engine parameters, are described in the AECD description, Section 16. Emission standards are met in all modes.
Production Intent Calibrations	Porsche attests that final development testing is conducted with production-intent calibrations, and that test vehicles are fully representative of the final products.

Section 8~Manufacturer Statements

8.02>> Manufacturer Attestations

SFTP Air/Fuel Ratio Requirements	For vehicles in test groups certified to Interim Tier-4 standards, in accordance with 40 CFR 86.1811-17(d), Porsche hereby attests that for all vehicles of this test group, at no time is the air/fuel ratio richer than the leanest mixture required to obtain maximum torque, plus a tolerance of 6%.
Lean-on-Cruise Calibration Strategies	For vehicles in test groups certified to Interim Tier-4 standards, Porsche hereby attests that any lean-on-cruise calibration strategies comply with terms in accordance with 40 CFR 86.1811-17(d)(4).
91 RON	As required by VPCD 97-01, Porsche attests that calibrations are designed to operate on 91 RON gasoline with no need for spark adjustment. Knock sensors have no influence on fuel economy or emissions results, beyond normal test variability.
Adjustable Parameters and Tamper Resistance	Porsche attests that no calibration parameters are adjustable, and therefore no tamper resistance measures are required.
Cold Temperature Defeat Device (Continuity of Emissions)	Based on engineering evaluation of emissions data at ambient, cold, and intermediate temperatures, Porsche hereby attests that this test group complies with the prohibition of defeat device requirements described in 40 CFR 86.1809. Please refer to the Final Part 2 Common Application for supporting data and analysis.
A/C Specific Calibrations	For vehicles in test groups certified to Interim Tier-4 standards, as required by 40 CFR 86.1811-17(d)(4), Porsche hereby attests that no A/C-On specific calibrations are employed which unnecessarily reduce the effectiveness of NMOG+Nox emissions control under reasonably expected real world conditions.
Leak-Free Exhaust System	Porsche has conducted a thorough engineering analysis to ensure that the complete exhaust systems described in this Application for Certification are designed to facilitate leak-free assembly, installation and operation for the full useful life of the vehicle, as required by CFR 86.1844.01(d)(16). Porsche further attests that such repairs as might be necessary on a properly maintained vehicle throughout its full useful life 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 facility.
California ASM and Inspection / Maintenance Standards	Porsche hereby certifies that all vehicles in this test group are designed to comply with OBD inspection requirements specified in ARB MAC#99-05.
California Fill Pipe Standards	In accordance with the Title 13, California Code of Regulations Section 2235, Porsche hereby certifies that based upon good engineering judgment and previous emissions testing, vehicles of this test group comply with the applicable fill pipe requirements.
GHG Compliance	As part of the Volkswagen Group of America, Porsche is not subject to GHG compliance as an independent entity. GHG compliance is managed at the Group level by VWGoA.
Criteria Pollutant Fleet Averages and Phase-Ins	As part of the Volkswagen Group of America, Porsche is not subject to these requirements as an independent entity. Fleet emission compliance is managed at the Group level by VWGoA.

Section 8~Manufacturer Statements

8.02>> Manufacturer Attestations

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.
California LEV IV SC03 Standards	Porsche hereby attests that vehicles in this test group meet applicable standards in accordance with 13 CCR 1961.4(d)(4).
Partial Soak Standard(s)	Vehicles in this test group are not part of Porsche's phase in for Partial Soak as set forth in 13 CCR 1961.4(d)(2)(B)1)
Quick Drive-Away Phase-In	Vehicles in this test group are not part of Porsche's phase in for Quick drive-away as set forth in 13 CCR 1961.4(d)(2)(C)1(a))
Partial Soak Phase-In	Vehicles in this test group are not part of Porsche's phase in for Partial Soak as set forth in 13 CCR 1961.4(d)(2)(B)1)
Intermediate Soak Compliance Statement	In accordance with 40 CFR 86.1829-15 (d)(7), Porsche hereby certifies that vehicles in this test group comply with the intermediate soak standards of 40 CFR 86.1811-27 (b)(4)(ii) for soak times not covered by testing.
LEV IV PM Attestation (in lieu of data submission)	Starting in MY26 - For all test groups that are certified to LEV IV PM standards for which test data is not submitted, the manufacturer must, in accordance with good engineering practices, attest that such test groups will comply with the applicable LEV IV PM standards.
California LEV IV SC03 Standards	Porsche hereby attests that vehicles in this test group meet applicable standards in accordance with 13 CCR 1961.4(d)(4).
ORVR-Safety Statement	Porsche is using standard technology in all MY2027 vehicles ORVR systems, as mentioned in the Pre-Certification meeting. In accordance with EPA Guidance letter CISC-06-06, ORVR application will not be submitted.

Section 9~OBD Description

9.01>> OBD System Description

The OBD Application for this test group was submitted to EV-CIS as the following stand-alone PDF document:

CBI_VPRXJ04.0CE8_OBD Application

Section 9~OBD Description

9.02>> ARB OBD Approval

Please refer to Section 16.

Section 10~Description of Alternate-Fueled Vehicles

This section is Not Applicable (Porsche has no Alternate-Fueled Vehicles).

Section 11~AECD Description

Please refer to Section 16.

Section 12~Test Parameters and Description of Vehicles Covered by Certificate

12.01>> Vehicle Description and Parameters

Carline	420	425	420	425
Model Name	Cayenne GTS	Cayenne GTS Coupe	Cayenne GTS	Cayenne GTS Coupe
Vehicle Classification	LDT4	LDT3	LDT4	LDT3
Sales Area	50 State	50 State	50 State	50 State
Transmission	AMS-8	AMS-8	AMS-8	AMS-8
Engine Displ. (L)	4.0	4.0	4.0	4.0
Engine Code	DWH	DWH	DWH	DWH
Catalysts	See Section 2	See Section 2	See Section 2	See Section 2
EGR Type	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Air Pump Type	None	None	None	None
Intake Air Aspiration Method	Turbocharged	Turbocharged	Turbocharged	Turbocharged
Idle Start/Stop	Default On	Default On	Default On	Default On
Drive Type	AWD	AWD	AWD	AWD
Starting Procedure	See Section 6.02	See Section 6.02	See Section 6.02	See Section 6.02
Cooling Fan				
Drive Accuracy Per 1066.425	Yes	Yes	Yes	Yes
SIL	None	None	None	None
Fuel System Type	Direct Injection	Direct Injection	Direct Injection	Direct Injection
Fuel Tank Vol. (Gal)	23.8	23.8	23.8	23.8
Optional Tank (Gal)	N/A	N/A	N/A	N/A
Canister Working Capacity (g)	176	176	176	176
Canister Bed Vol (L)	2.79	2.79	2.79	2.79
Fuel Temperature Profile	See Section 6.04	See Section 6.04	See Section 6.04	See Section 6.04
ETW (Lb)	5500	5500	5500	5500
Curb Weight	5148	5108	5148	5108
Gross Vehicle Weight	6371	6371	6371	6371
Test Horsepower	493	493	493	493
Shift Schedules	See Section 6	See Section 6	See Section 6	See Section 6
Cooling Fan Configuration				
Axle Ratio	3.21	3.21	3.21	3.21
N/V Ratio	23.0	23.0	23.0	23.0
Tire Sizes	Front	285/45 R21	285/45 R21	285/45 R21
	Rear	315/40 R21	315/40 R21	315/40 R21
RLHP	17.8	18.2	17.0	17.4
Single Roll Coefficients (target)	A (lbf)	54.81	52.49	44.51
	B [lbf/mph]	0.1096	0.2996	0.2978
	C [lbf/mph²]	0.02916	0.02758	0.02719

Note: RLHP details for all model types and sub-configurations are available from Porsche upon request.

Section 12~Test Parameters and Description of Vehicles Covered by Certificate

12.01.02>< Vehicle Description Continued

Carline	410	415	410	415
Model Name	Cayenne S	Cayenne S Coupe	Cayenne S	Cayenne S Coupe
Vehicle Classification	LDT4	LDT3	LDT4	LDT3
Sales Area	50 State	50 State	50 State	50 State
Transmission	SA	SA	SA	SA
Engine Displ. (L)	4.0	4.0	4.0	4.0
Engine Code	DWH	DWH	DWH	DWH
Catalysts	See Section 2	See Section 2	See Section 2	See Section 2
EGR Type	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Air Pump Type	None	None	None	None
Intake Air Aspiration Method	Turbocharged	Turbocharged	Turbocharged	Turbocharged
Idle Start/Stop	Default On	Default On	Default On	Default On
Drive Type	AWD	AWD	AWD	AWD
Starting Procedure	See Section 6.02	See Section 6.02	See Section 6.02	See Section 6.02
Cooling Fan				
Drive Accuracy Per 1066.425	Yes	Yes	Yes	Yes
SIL	None	None	None	None
Fuel System Type	Direct Injection	Direct Injection	Direct Injection	Direct Injection
Fuel Tank Vol. (Gal)	23.8	23.8	23.8	23.8
Optional Tank (Gal)	N/A	N/A	N/A	N/A
Canister Working Capacity (g)	176	176	176	176
Canister Bed Vol. (L)	2.79	2.79	2.79	2.79
Fuel Temperature Profile	See Section 6	See Section 6	See Section 6	See Section 6
ETW [Lb]	5500	5500	5500	5500
Curb Weight	5165	5068	5157	5060
Gross Vehicle Weight	6460	6415	6460	6415
Test Horsepower	468	468	468	468
Shift Schedules	See Section 6	See Section 6	See Section 6	See Section 6
Cooling Fan Configuration				
Axle Ratio	3.21	3.21	3.21	3.21
N/V Ratio	23.0	23.0	23.0	176.0
Tire Sizes	Front	285/45 R21	285/45 R21	285/45 R21
	Rear	315/40 R21	315/40 R21	315/40 R21
RLHP	18.4	18.4	17.3	17.6
Single Roll Coefficients (target)	A [lbf]	52.27	52.27	45.25
	B [lbf/mph]	0.3177	0.3177	0.3072
	C [lbf/mph²]	0.02799	0.02799	0.02759

Note: blank cells or tables are intentionally blank.

Section 12~Test Parameters and Description of Vehicles Covered by Certificate

12.01.03>< Vehicle Description Continued

Carline	610	610		
Model Name	Panamera GTS	Panamera GTS		
Vehicle Classification	PC	PC		
Sales Area	50 State	50 State		
Transmission	AMS-8	AMS-8		
Engine Displ. (L)	4.0	4.0		
Engine Code	DVT	DVT		
Catalysts	See Section 2	See Section 2		
EGR Type	Not Applicable	Not Applicable		
Air Pump Type	None	None		
Intake Air Aspiration Method	Turbocharged	Turbocharged		
Idle Start/Stop	Default On	Default On		
Drive Type	AWD	AWD		
Starting Procedure	See Section 6.02	See Section 6.02		
Cooling Fan				
Drive Accuracy Per 1066.425	Yes	Yes		
SIL	None	None		
Fuel System Type	Direct Injection	Direct Injection		
Fuel Tank Vol. (Gal)	23.8	23.8		
Optional Tank (Gal)	N/A	N/A		
Canister Working Capacity (g)	190	190		
Canister Bed Vol (L)	3.3	3.3		
Fuel Temperature Profile	See Section 6	See Section 6		
ETW [Lb]	5000	5000		
Curb Weight	4733	4736		
Gross Vehicle Weight	5919	5919		
Test Horsepower	2100	2100		
Shift Schedules	See Section 6	See Section 6		
Cooling Fan Configuration				
Axle Ratio	3.36	3.36		
N/V Ratio	21.7	21.7		
Tire Sizes	Front	275/35 R21	275/35 R21	
	Rear	325/30 R21	325/30 R21	
RLHP	15.6	14.1		
Single Roll Coefficients (target)	A (lbf)	42.44	32.82	
	B [lbf/mph]	0.6114	0.5355	
	C [lbf/mph²]	0.01772	0.01839	

Note: blank cells or tables are intentionally blank.

Section 13~Projected Sales

13.01>> Sales / Phase-ins

Confidential. See Section 16 in CBI version.

Section 14~Request for Certification

14.01>> Statement of Compliance

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

The term pollutants means:

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

or any other pollutant, which Porsche has identified, which can reasonably be expected to be emitted from these vehicles.

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

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

Signed and dated by:



April 28, 2026

Michael Scott – Porsche Cars North America, Inc.

Section 15~Other Information

15.01>> EPA Fee Filing Form

Appears on the following page.

US EPA Fee Form

[Help and EPA Instructions](#)

* Required Field

General Information

Date: 03/31/2026

Process Code *

Submit New Fee Filing Form

Manufacturer Code *

PRX

Manufacturer Name *

Porsche Cars North America

Contact Name *

Peter Khamphouvong

Contact Email Address *

peter.khamphouvong@porsche.us

Contact Phone *

6787091264

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 *

VPRXJ04.0CE8

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

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).

Khamphouvong, Peter (PCNA-BR2)

From: fees@epa.gov
Sent: Monday, April 13, 2026 8:49 AM
To: Khamphouvong, Peter (PCNA-BR2)
Subject: Confirmation of Certification Fees Payment

ATTENTION: This is an external email. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please use the Phish Alert Button in your Outlook ribbon to report suspicious emails.

To the representative for Porsche AG:

Your certification Fee Filing Form(s) submitted for the following family or test group(s) and the associated financial documentation for your payment of \$258536.00 were received on 04/13/2026.

- VPRXJ03.0CV6
- VPRXJ03.0HV6
- VPRXJ04.0CE8
- VPRXJ04.0HV8
- VPRXT00.0ECT
- VPRXT00.0EMT
- VPRXT04.0CV8
- VPRXV00.0EMS

This message indicates only that EPA has received record of your payment and form(s) for the above certification fee. It does not constitute the granting of a Certificate of Conformity by EPA or convey any information about the status of your certification application for the subject family or test group(s).

Please do not respond to this email. If you have any questions regarding certification of the family or test group(s), please contact your EPA Certification Representative; for questions on fees, contact Fees@epa.gov.

Section 16~Confidential Information

None.