

# CARB LDV E-Cert Form

Version 2.0.5.0

Please enter all data in UPPERCASE.

## Contact Information

CARB MFR Code:	<input type="text" value="ARB"/>
First Name:	<input type="text" value="STEVEN"/>
Last Name:	<input type="text" value="HADA"/>
Phone Number:	<input type="text" value="626-575-6641"/>
Email Address:	<input type="text" value="SHADA@ARB.CA.GOV"/>

## Application

### General Information

CARB MFR Code:	<input type="text" value="ARB"/>
Model Year:	<input type="text" value="2018"/>
Test Group Name:	<input type="text" value="JARBV0.99HEV"/>
Application Type:	<u>NEW</u>

### CSI 1

Durability Group Name:	<input type="text" value="JARBHGGNNHEV"/>
Running Change Reference Number/Name:	<input type="text"/>
CARB TG Classification:	<u>50 STATES</u>
CARB TG Interim / In-Use FTP Standard:	<u>NMOG+NOx</u>
CARB TG Interim / In-Use SFTP Standard:	<u>NMOG+NOx</u>
Federally-Certified Vehicle (Cleaner Federal Vehicle):	<u>NO, THIS TEST GROUP COMPLIES WITH CA LOW EMISSION VEHICLE STANDARDS</u>
CARB FTP Standard:	<u>LEV3 SULEV20</u>

EPA FTP Standard: NOT APPLICABLE  
 SFTP Standard: LEV 3 COMPOSITE  
 Please select a vehicle class of a TG, or a vehicle class to which the most stringent standard is applied, if multiple vehicle classes are in the TG: PASSENGER CAR  
 Does this TG meet optional LEV NOx exhaust emission standard certification for "Work Trucks"?: NO  
 TG Fuel Category: PLUG-IN HYBRID ELECTRIC VEHICLE  
 Light-Duty Specially Constructed Vehicles (SPCNS): NO, THIS TEST GROUP IS NOT SPCNS

Light-Duty Specially Constructed Vehicles Only	
Weight of Worst Case Vehicle (lbs)	N/V Ratio of Worst Case Vehicle

OBD Approval Reference Number: E-99-999

CSI 1 Manufacturer Notes: THIS IS A TEST FILE, MAY 2014.

## CSI 2A

Exhaust Emissions UL Years:  Miles:   
 Is any model in the TG granted DOR? NO  
 Does NMOG Cert include DOR NMOG Credit? NO  
 Is any model in the TG granted Non-PZEV Zero Evap? NO  
 Does NMOG Cert include Non-PZEV Zero-Evap NMOG Credit? NO  
 Direct measurement of NMOG? YES  
 NMOG+NOx fleet average credit for extended warranty? NO

FTP NMOG/NMHC ratio:  HCHO/NMHC ratio:

RAF for NMOG:  RAF for Methane:

**FTP Exhaust Emissions:**

FTP Exhaust Emissions Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Exhaust FTP xxHC Type: NON-METHANE ORGANIC GAS (NMOG)

If Other, Specify:

Modified Test Procedure for FTP Test? (If yes, describe modification & approval ref # in FTP Manufacturer Note) NO

Does this TG have a FFH? NO

Is the FFH operable above 40°F? NOT APPLICABLE

Does FTP CERT include FFH exhaust? NOT APPLICABLE

Units: (g/mi)									
Air Pollutant	xxHC	NOx	NMOG + NOx	CO	HCHO (mg/mi)	PM	Highway NOx	Highway NMOG + NOx	Cold-CO
4K CERT (50°F)			0.037	0.8	7				
4K STD (50°F)			0.040	1.0	8				
50K CERT									
50K STD									
UL CERT			0.018	0.2	3	0.004		0.009	
UL STD			0.020	1.0	4	0.01		0.020	

**FTP Exhaust Emissions:**

FTP Exhaust Emissions Test Fuel: GASOLINE - COLD CO HIGH OCTANE (40CFR 86.213-04)

If Other, Specify:

Exhaust FTP xxHC Type:

NON-METHANE ORGANIC GAS (NMOG)

If Other, Specify:

Modified Test Procedure for FTP Test? (If yes, describe modification & approval ref # in FTP Manufacturer Note) NO

Does this TG have a FFH? NO

Is the FFH operable above 40°F? NOT APPLICABLE

Does FTP CERT include FFH exhaust? NOT APPLICABLE

Units: (g/mi)									
Air Pollutant	xxHC	NOx	NMOG + NOx	CO	HCHO (mg/mi)	PM	Highway NOx	Highway NMOG + NOx	Cold-CO
4K CERT (50°F)									
4K STD (50°F)									
50K CERT									9.7
50K STD									10.0
UL CERT									
UL STD									

CSI 2A Manufacturer Note for FTP Exhaust Emissions:

THIS IS A TEST, THIS IS ONLY A TEST.™

**SFTP Exhaust Emissions:**

SFTP Exhaust Emissions Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Modified Test Procedure for SFTP Test? (If yes, describe modification) NO

& approval ref # in SFTP  
 Manufacturer Note)

SFTP Test Cycle	US06			SC03		Composite		
Air Pollutant	xxHC + NOx (g/mi)	CO (g/mi)	PM (mg/mi)	xxHC + NOx (g/mi)	CO (g/mi)	xxHC + NOx (g/mi)	CO (g/mi)	PM (mg/mi)
4K CERT:								
4K STD:								
UL CERT:						0.043	3.9	
UL BIN:						0.050		
UL STD:						0.097	4.2	

CSI 2A Manufacturer Note for  
 SFTP Exhaust Emissions:

THIS IS A TEST.

## CSI 2B

### Evaporative/Refueling Emissions:

Evap Data Set Number: 1 (Select a sequential number, starting with 1 for each Evaporative Data Set.)

Evap Refuel Family: JARBR0222HEV

Certification option for evaporative emissions: LEV 3 OPTION 2 WITH FEL

Evap Emission STD Vehicle Class: PASSENGER CAR

Cert Test Fuel for Evap: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Cert Test Fuel for ORVR: GASOLINE - TIER 2 UNLEADED (40CFR86.113-04(a)(1))

If Other, Specify:

Modified Test Procedure for Evap Test? NO  
 (If yes, describe modification & approval ref # in Manufacturer Note)

Evap Pollutant Type: TOTAL HYDROCARBONS (THC)

	Evaporative Emissions			Zero-Fuel Evaporative Emissions (g/test)		Canister Bleed (g/test)	ORVR (g/gal)
	3-Days + Hot Soak (g/test)	2-Days + Hot Soak (g/test)	Running Loss (g/mi)	3-Days + Hot Soak	2-Days + Hot Soak		
CERT:	0.099	0.077	0.01			0.007	0.06
FEL:	0.250	0.250					
STD:	0.300	0.300	0.05			0.020	0.20

**Evaporative Emissions:**

Leak Family Identifier	Cert (inches)	Standard (inches)
JARBR0222HEV-L01	0.007	0.02

Evap UL Years:  Evap UL Miles:

ORVR UL Years:  ORVR UL Miles:

NMOG credit (g/mi) used for zero evap cert (rig test only):

Evap emissions (g/test) offset by NMOG credit for zero evap test (rig test only):

CSI 2B Manufacturer Note:

**CSI 3**

**Test Group Description:**

Engine Set Number:  (Select a sequential number, starting with 1 for each Set Number.)

Engine Location (relation to the front of the vehicle):

TG Combustion Cycle:  If Other:

Cylinder/Block Arrangement:  If Other:

Number of Cylinders/Rotors:

Engine Cooling Medium:  If Other:

Engine Displacement (L):

Intake Valves per Cylinder:	Exhaust Valves per Cylinder:
<input type="text" value="2"/>	<input type="text" value="2"/>

Engine Valvetrain:  If Other:

Intake Variable Valve Timing (VVT):

Exhaust Variable Valve Timing:

(VVT):

Intake Valve Lift: FIXED 1 (ONLY ONE VALVE LIFT)

Exhaust Valve Lift: FIXED 1 (ONLY ONE VALVE LIFT)

Cylinder Deactivation: NO

Engine Special Features 1	Engine Special Features 2
<u>NOT APPLICABLE</u>	<u>NOT APPLICABLE</u>

TG Operating Fuel	TG Fuel Metering	TG Fuel Metering (If Other)	Rated Power (hp)	@RPM	Peak Torque (foot-pounds)	@RPM
<u>GASOLINE</u>	<u>DIRECT FUEL INJECTION</u>		88	6,100	77	4,100

CSI 3 Manufacturer Note:

THIS IS A TEST.

**CSI 4 (All fields in red are considered CBI)**

**Exhaust Emissions Control System (ECS) Information:**

ECS Set Number: 1 (Select a sequential number, starting with 1 for each Set Number.)

Electronic Controls: PCM If Other:

ECS Configuration: TWC, WR-HO2S, HO2S, DFI, TC, CAC

Exhaust Gas Recirculation (EGR): NO

Cooled EGR: NOT APPLICABLE

EGR Type: NOT APPLICABLE If Other:

Air Aspiration Method in the TG: SINGLE STAGE TURBO CHARGED If Other:

Number of Air Aspiration Devices: 1

Air Aspiration Configuration: SINGLE

Charge Air Cooler Type: AIR-TO-AIR  
Number of Charge Air Coolers: 1  
Charge Air Cooler Configuration: SINGLE  
Air Injection: NOT APPLICABLE If Other:  
Direct Ozone Reduction (DOR) Device: NO  
Total Number of Physical Container(s) of ATD(s): 1  
This ECS Set is used for Production Vehicles: YES  
This ECS Set is used for EDV: YES  
This ECS Set is used for DDV: YES  
CSI 4 Manufacturer Note: TEST.

**After-Treatment Device (ATD) Information:**

ATD Container Number: 1 (Select a sequential number, starting with 1 for each ATD container.)  
After-Treatment Type: THREE-WAY CATALYST  
200k Miles Extended Warranty for Particulate Filter: Select...  
**Total Number of Physical Substrates (bricks) in this container:** 1  
**ATD Note:** BREATHE E-Z CATALYST CO.

### Brick (Substrate) Information:

<b>Size of Substrate (liters):</b>	<input type="text" value="2.99"/>	
<b>Substrate Precious Metals:</b>	<input type="text" value="PLATINUM"/>	<b>If</b>
<b>Substrate Material:</b>	<input type="text" value="CERAMIC"/>	<b>Other:</b>
<b>Substrate Construction:</b>	<input type="text" value="MONOLITH"/>	<b>If</b>
<b>Cell Geometry:</b>	<input type="text" value="SQUARE"/>	<b>Other:</b>
<b>Substrate Cell Density (# of cells / in<sup>2</sup>):</b>	<input type="text" value="999"/>	<b>If</b>
<b>Substrate Specific Active Surface Area (m<sup>2</sup>/liter):</b>	<input type="text" value="999"/>	<b>Other:</b>
<b>Precious Metal Loading Rate (g/liter):</b>	<input type="text" value="999"/>	
<b>Precious Metal Composition:</b>	<input type="text" value="999"/>	
<b>Uniform Loading of Precious Metals?</b>	<input type="text" value="YES"/>	

### Exhaust Feedback Sensor Information:

Sensor Type: WIDE RANGE/LINEAR/AIR-FUEL RATIO HEATED OXYGEN SENSOR

Sensor Type: HEATED OXYGEN SENSOR

### Other Sensor Information:

## CSI 5A (All fields in red are considered CBI)

### Exhaust Emission Data Vehicle (EDV) Information:

EDV Set Number:  (Select a sequential number, starting with 1 for each Set Number.)

Test Group Name:

EDV Division Name:

EDV Model Name:

EDV Test Vehicle ID:	<input type="text" value="54321"/>	
EDV Test Data Type:	NEW TEST DATA	
Original TG of EDV:		
Original Evap Family of EDV:		
EDV Engine Code:	<input type="text" value="2014A"/>	
EDV Displacement (liters):	<input type="text" value="0.99"/>	
EDV Cylinder (Block) Arrangement:	INLINE	
If Other, Specify:	<input type="text"/>	
EDV Number of Cylinders:	<input type="text" value="3"/>	
EDV Number of Intake Valves per Cylinder:	<input type="text" value="2"/>	
EDV Number of Exhaust Valves per Cylinder:	<input type="text" value="2"/>	
EDV Drive System:	REAR WHEEL DRIVE	
EDV N/V Ratio:	<input type="text" value="99"/>	
EDV Curb Weight (lb):	<input type="text" value="1999"/>	
EDV LVW (lb):	<input type="text"/>	
EDV ALVW (lb):	<input type="text"/>	
EDV ETW (lb):	<input type="text" value="2125"/>	
EDV GVWR (lb):	<input type="text" value="3500"/>	
EDV ECS Set Number:	<input type="text" value="1"/>	(enter the ECS set number from CSI 4)
EDV Rated Power (hp):	<input type="text" value="88"/>	@ RPM: <input type="text" value="6,100"/>
EDV Transmission Type:	CONTINUOUSLY VARIABLE	
EDV Number of Transmission Gears:	<input type="text"/>	
Alternate Shift:	<u>NO</u>	
Shift Indicator Lamp (SIL):	<u>NO</u>	
Transmission Shift Mode for Exhaust Emission Test:	<u>NORMAL</u>	If Other:

**ATD Grouping Statistic of EDV:**

9

Tire Size:

Front:

Rear:

**Raw Test Results without DF:**

Test Type: FEDERAL TEST PROCEDURE (FTP)

Tested By: CARB

Test ID: 5-2017

Test Date: 5/8/2017

Exh Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Tested For: CERTIFICATION

Target Coefficient A (lb<sub>f</sub>): 20.1

Target Coefficient B (lb<sub>f</sub>/mph): .002

Target Coefficient C (lb<sub>f</sub>/mph<sup>2</sup>): 2.3

PHEV Operating Mode: CHARGE SUSTAINING

Is this the official certification test?: YES

THC (g/mi)	NMHC (g/mi)	NMOG (g/mi)	NOx (g/mi)	CO (g/mi)	HCHO (mg/mi)	PM (g/mi)	CO <sub>2</sub> (g/mi)	MPG	CH4 (g/mi)	N2O (g/mi)
		0.015	0.003	0.2	3	0.004	98	69.6	.0018	.0022

CSI 5A Manufacturer Note:

**CSI 5B (All fields in red are considered CBI)**

**Durability Data Vehicle (DDV) and Emission Test Data:**

DDV Set Number: 1 (Select a sequential number, starting with 1 for each Set Number.)

MFR Vehicle ID:

Durability Group Method: DF

DDV ECS Set Number (From CSI 4):

**ATD Grouping Statistic:**  (ATD grouping statistic for this set of ATDs used for the DDV)

**Max ATD Grouping Statistic:**  (Maximum ATD grouping statistic for the durability group of the DDV)

**Min ATD Grouping Statistic:**  (Minimum ATD grouping statistic for the durability group of the DDV)

Durability Data Type: NEW TEST DATA

Original Durability Group Name:

Aging Method: SRC - STANDARD ROAD CYCLE

Manufacturer ADP CARB Approval Ref #:

Durability Group Equivalency Factor:

ADP/Bench-aged Components:

Durability Group Operating Fuel	Durability Group Fuel Metering	Durability Group Fuel Metering Other
<u>GASOLINE</u>	<u>DIRECT FUEL INJECTION</u>	

**Raw Exhaust Emission Test Results:**

Exhaust Test Date:

Test Point Mile:

MFR Test ID Number:

Exh Durability Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other:

DF Emissions Test Type: FEDERAL TEST PROCEDURE (FTP)

PHEV Operating Mode: CHARGE SUSTAINING (PHEV test only)

THC (g/mi)	NMHC (g/mi)	NMOG (g/mi)	NOx (g/mi)	CO (g/mi)	HCHO (mg/mi)	PM (g/mi)	CO <sub>2</sub> (g/mi)	CH <sub>4</sub> (g/mi)	N <sub>2</sub> O (g/mi)
		0.013	0.002	0.9	1	0.001	91		

**Deterioration Factors (DF):**

DF Emissions Test Type: FEDERAL TEST PROCEDURE (FTP)

DF Type: ADDITIVE DF (NON-NEGATIVE)

	(Units for Additive DF: mg/mi for HCHO, g/mi for all others)							
	NMHC	NMOG	NOx	Highway NOx	CO	HCHO	PM	Cold-CO
50K DF								
UL DF		0.001	0.0001	0.0001	0	0.5	0.03	0

CSI 5B Manufacturer Notes:

**CSI 6A**

**Evaporative Family Description:**

Evap Family Set Number: 1 (Select a sequential number, starting with 1 for each Set Number.)

Evap Family: JARBR0222HEV

ORVR Type: NON-INTEGRATED

Fill Pipe Seal Mechanism: LIQUID TRAP If Other:

Fill Pipe Compliant: YES

Tank Material: HDPE (HIGH-DENSITY POLYETHYLENE)

If Other, Specify:

Tank Temperature Profile Development: ENVIRONMENTAL CHAMBER

Approval # (Environmental Chamber only):

C-99-999  
 Zero Evap Compliance: YES  
 Is the vehicle a PZEV?: NO  
 HC Capture Method for Canister Bleed Test: METHOD A

	Evap Family Operating Fuel	Evap Family Operating Fuel Other
<u>GASOLINE</u>		

**Canister Information:**

Canister Type: BLEED CANISTER  
 Number of Canisters: 1  
 Canister Configuration: SINGLE  
 Total Butane Working Capacity (g): 99  
 Canister Total Bed Volume (cc): 222  
 Canister Storage Medium: ACTIVATED CARBON  
 Canister Notes:

**Fuel Tank Information:**

Fuel Tank Set Number: 1 (Select a sequential number, starting with 1 for each Set Number.)  
 Used for Production Vehicle: YES  
 Used for Evap EDV: YES  
 Used for Evap DDV: YES  
 Number Of Fuel Tanks: 1  
 40%-Fill Total Fuel Tank(s) Capacity (Gallons): 7.8  
 100%-Fill Total Fuel Tank(s) Capacity (Gallons): 19.5  
 Fuel Tank(s) Total Geometric Volume (Gallons): 21

Fuel Tank Notes:

CSI 6A Manufacturer Note:

## CSI 6B

### Evaporative Refueling Emission Data Vehicle (EDV) Information:

Evap EDV Set Number:  (Select a sequential number, starting with 1 for each Set Number.)

Evap Family Name:

Evap Test Vehicle ID:

Evap Test Vehicle Model:

EDV Evap Type:

Original Evap Family of Evap EDV:

TG of Evap EDV:

Evap Test Vehicle Engine Code:

Displacement (liters):

Rated Power (hp):  @RPM:

Cylinder (Block) Arrangement:

If Other, Specify:

Number of Cylinders:

Transmission:

If Other, Specify:

Number of Transmission Gears:

Target Coefficient A (lb<sub>f</sub>):

Target Coefficient B (lb<sub>f</sub>/mph):

Target Coefficient C (lb<sub>f</sub>/mph<sup>2</sup>):

Tire Size

Front:

Rear:

Curb Weight (lb):

LVW (lb):

ALVW (lb):

ETW (lb):

GVWR (lb):

Fuel Tank Set Number (From CSI6A):

**Raw Evaporative Refueling Test Results:**

Evap Test Type:

3-DAYS + HOT SOAK (WHOLE VEHICLE, G/TEST)

Evap Test Date:

Evap Test ID Number:

Tested By:

MANUFACTURER

Evap Test Fuel:

CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Official Cert Test:

YES

Tested For:

CERTIFICATION

R/L Test:

Test Procedure:

CARB

Evap Pollutant Type:

TOTAL HYDROCARBONS (THC)

	1 <sup>st</sup> Day	2 <sup>nd</sup> Day	3 <sup>rd</sup> Day	Hot Soak
Raw Evap Test for 3D+HS (g/test)	0.199	0.199	0.188	0.050
Raw Evap Test for 2D+HS				

(g/test)

Raw Evap Test for Running Loss (g/mi):

Raw Evap Test for ORVR (g/gallon):

Raw Evap Test for Canister Bleed (g/test):

**Raw Evaporative Refueling Test Results:**

Evap Test Type: 2-DAYS + HOT SOAK (WHOLE VEHICLE, G/TEST)

Evap Test Date:

Evap Test ID Number:

Tested By: MANUFACTURER

Evap Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

Official Cert Test: YES

Tested For: CERTIFICATION

R/L Test:

Test Procedure: CARB

Evap Pollutant Type: TOTAL HYDROCARBONS (THC)

	1 <sup>st</sup> Day	2 <sup>nd</sup> Day	3 <sup>rd</sup> Day	Hot Soak
Raw Evap Test for 3D+HS (g/test)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Raw Evap Test for 2D+HS (g/test)	0.077	0.070	<input type="text"/>	0.000

Raw Evap Test for Running Loss (g/mi):

Raw Evap Test for ORVR (g/gallon):

Raw Evap Test for Canister Bleed (g/test):

**Raw Evaporative Refueling Test Results:**

Evap Test Type: ON-BOARD REFUELING VAPOR RECOVERY (G/GALLON)

Evap Test Date:

Evap Test ID Number:   
 Tested By: MANUFACTURER  
 Evap Test Fuel: GASOLINE - TIER 2 UNLEADED (40CFR86.113-04(a)(1))  
 If Other, Specify:   
 Official Cert Test: YES  
 Tested For: CERTIFICATION  
 R/L Test:  
 Test Procedure: CARB  
 Evap Pollutant Type: TOTAL HYDROCARBONS (THC)

	1 <sup>st</sup> Day	2 <sup>nd</sup> Day	3 <sup>rd</sup> Day	Hot Soak
Raw Evap Test for 3D+HS (g/test)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Raw Evap Test for 2D+HS (g/test)	<input type="text"/>	<input type="text"/>		<input type="text"/>

Raw Evap Test for Running Loss (g/mi):   
 Raw Evap Test for ORVR (g/gallon):   
 Raw Evap Test for Canister Bleed (g/test):

**Raw Evaporative Refueling Test Results:**

Evap Test Type: CANISTER BLEED (G/TEST)  
 Evap Test Date:   
 Evap Test ID Number:   
 Tested By: MANUFACTURER  
 Evap Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)  
 If Other, Specify:   
 Official Cert Test: YES  
 Tested For: CERTIFICATION  
 R/L Test:  
 Test Procedure: CARB  
 Evap Pollutant Type: TOTAL HYDROCARBONS (THC)

	1 <sup>st</sup> Day	2 <sup>nd</sup> Day	3 <sup>rd</sup> Day	Hot Soak
Raw Evap Test for 3D+HS (g/test)				
Raw Evap Test for 2D+HS (g/test)				

Raw Evap Test for Running Loss (g/mi):

Raw Evap Test for ORVR (g/gallon):

Raw Evap Test for Canister Bleed (g/test):

**Effective Leak Diameter Test Results:**

Evap Test Type: EFFECTIVE LEAK DIAMETER TEST (INCHES)

Test ID #	Test Date	Alternate TP?	Vgas (m <sup>3</sup> /s)	Pin (kPa)	Patm (kPa)	T (K)	Leak Diameter (inches)
<b>LT00001</b>	<b>2/5/2017</b>	<b><u>NO</u></b>	<b>0.00002</b>	<b>350</b>	<b>101</b>	<b>288</b>	<b>0.00723</b>

CSI 6B Manufacturer Note:

**CSI 6C**

**Evaporative DDV and Durability Test Information:**

Evaporative DDV Set Number: 1 (Select a sequential number, starting with 1 for each Set Number.)

Evaporative Family:

Evap DF Type: MANUFACTURER DF

DDV Evap Type: NEW APPLICATION FOR A TEST GROUP (COMPLETE DATA SET MUST BE SUBMITTED)

Evap Family of Evap DDV:

TG of Evap DDV:

Evap DDV Test Vehicle Model:

Displacement (liters):

Fuel Tank Set Number (From CSI6A):

Evaporative DDV Note:

**Durability Information:**

Evaporative Durability Info Number:  (Select a sequential number, starting with 1 for each Set Number.)

Durability Information Type: VEHICLE INFORMATION

Manufacturer Durability Set (Bench/Vehicle/Rig Test) ID:  (Start with 1 and increment to the total number of different evaporative durability test)

Vehicle Test ID:  (Vehicle Evap DF Test Only)

Evaporative Test Type: 3-DAYS + HOT SOAK (WHOLE VEHICLE, G/TEST)

Test ID Number:

Test Point (miles):

Test Date:

Evap Durability Test Fuel: CA LEV3 E10 CERT GASOLINE (CA ExTP II A 100.3.1.2)

If Other, Specify:

	1 <sup>st</sup> Day	2 <sup>nd</sup> Day	3 <sup>rd</sup> Day	Hot Soak
Raw Evap Test for 3D+HS (g/test)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Raw Evap Test for 2D+HS (g/test)	<input type="text"/>	<input type="text"/>		<input type="text"/>

Raw Evap Test for Running Loss (g/mi):

Raw Evap Test for ORVR (g/gallon):

Used For DF Calculation: YES

**Deterioration Factors (DF):**

	<b>3-Days + Hot Soak (g/test)</b>	<b>2-Days + Hot Soak (g/test)</b>	<b>Running Loss (g/mi)</b>	<b>ORVR (g/gallon)</b>
Overall Bench Evap DF:	0.000	0.000	0.000	0.000
Vehicle Evap DF:				
Overall Certification Evap DF:	0.000	0.000		

Bench DF Manufacturer Notes:

Vehicle DF Manufacturer Notes:

**CSI 7 (All fields in red are considered CBI)**

**Vehicle Model Summary:**

Model Number:	<u>1</u> (Select a sequential number, starting with 1 for each Model Number.)
Vehicle Make:	HAHA
Carline Name:	DESOTOMAYOR
Badge Name:	SONJA DESOTOMAYOR
Body Style:	DROPDEAD COUPÉ
MFR Model Code:	XXX
Trim Level (i.e., CE, LE, etc):	BROUGHAMTASTIC

Vehicle Class:	<u>PASSENGER CAR</u>
ECS Set Number (From CSI 4):	1
Engine Code:	2014A
Engine Set Number (From CSI 3):	1
Evap Family:	JARBR0222HEV
Leak Family Identifier: (From CSI 2B)	JARBR0222HEV-L01
Min Curb Weight (lbs):	1901
Max Curb Weight (lbs):	1999
Min ETW (lbs):	2000
Max ETW (lbs):	2125
Min GVWR (lbs):	3500
Max GVWR (lbs):	3500
Drive System:	<u>REAR WHEEL DRIVE</u>
<b>Electric Drive Motor Set # (From CSI 10A):</b>	
1	
HEV Test Vehicle ID: (From CSI 10A)	54321
Regenerative Braking:	<u>REAR WHEELS</u>
Modified Test Procedure:	<u>NO</u>
Shift Indicator Lamp (SIL):	<u>NO</u>
Driver Selectable Modes:	<u>NO</u>
If Yes, Describe the Modes:	
Manufacturer Shift Schedule No. (City, Hwy, US06, SC03):	
Label Type:	<u>50 STATES</u>
<b>CA Projected Sales:</b>	999
<b>Section 177 States Projected Sales:</b>	8888
NMOG Credit Non PZEV Zero Evap:	
NMOG Credit DOR Vehicle:	

**PZEV Allowances:**

Baseline PZEV Allowance:

Zero Emissions VMT Allowance:

**Advanced ZEV Componentry Allowance:**

High Pressure Gaseous or Hydrogen Fuel Storage:  Qualifying HEV Electric Drive System: TYPE G

Allowance for Qualifying HEV Electric Drive System:

Fuel Cycle Emissions:

Hydrogen Internal Combustion Engine:

Allowance for US06 Capability:

**Model Type:**

Transmission Set Number:  (Select a sequential number, starting with 1 for each Transmission Set Number.)

Transmission Type: CONTINUOUSLY VARIABLE If Other, Specify:

Transmission Gear #:

Model Type:

**Axle Ratio**

Evap Family Set Number (From CSI 6A)	Fuel Tank Set Number (From CSI 6A)
<input type="text" value="1"/>	<input type="text" value="1"/>

CSI 7 Manufacturer Note:

**CSI 10A**

HEV Set Number:  (Select a sequential number, starting with 1 for each Set Number.)

HEV Energy Storage Device Category:

	<u>BATTERY</u>
If Other, Specify:	
Does the Test Group include a BEVx?	<u>NO</u>
If yes, select the type of BEVx:	<u>Select...</u>
<b>Battery:</b>	
Battery Type:	<u>LI+ (LITHIUM ION)</u>
If Other, Specify:	
Number of Battery Cells:	<input type="text" value="77"/>
Total Weight of Battery System (kg):	<input type="text" value="123"/>
Total Battery System Voltage:	<input type="text" value="120"/>
Total Battery System Specific Energy Density (Whr/Kg):	<input type="text" value="99"/>
Battery Thermal Management:	<u>ACTIVE-AIR COOLED</u>
If Other, Specify:	
Electric Vehicle Charging Requirements (Sec. 1962.3)?:	<u>YES, THIS MODEL COMPLIES WITH SECTION 1962.3 'ELECTRIC VEHICLE CHARGING REQUIREMENTS'</u>
Total Number of Capacitors:	<input type="text"/>

**Capacitor Rating (Farads)**

<b>Drive Motor:</b>	
Number of Drive Motors:	<input type="text" value="1"/>
Electric Drive Motor Set Number:	<u>1</u> (Select a sequential number, starting with 1 for each Set Number.)
Drive Motor Type:	<u>AC INDUCTION</u>
If Other, Specify:	
Drive Motor Mechanical Power (kW):	<input type="text" value="88"/> @RPM: <input type="text" value="5,000"/>
Drive Motor Peak Torque (Nm):	<input type="text" value="123"/>

<b>HEV Test Parameter Information Section:</b>	
HEV Test Vehicle ID:	<input type="text" value="54321"/>
HEV Electric Drive System Peak Power Output (kW):	<input type="text" value="77"/>
HEV Traction Drive System Voltage (V):	<input type="text" value="120"/>
HEV Traction Drive System Boost:	<u>YES, HEV HAS TRACTION DRIVE BOOST SYSTEM</u>

HEV Regenerative Braking:

ELECTRICAL REGENERATIVE BRAKING

If Other, Specify:

**Off-Vehicle Charge Capable Hybrid Electric Vehicles:**

<b>Urban</b>	
Manufacturer Urban Test #:	2
Charge Depleting Cycle Range ( $R_{cdcu}$ , mi):	50
Charge Depleting Actual Range ( $R_{cda}$ , mi):	40
Charge Depleting to Charge Sustaining Range ( $R_{cdcsu}$ , mi):	12
All Electric Range ( $AER_u$ , mi):	51
Equivalent All Electric Range ( $EAER_u$ , mi):	42
Equivalent Electric Range Fraction ( $ERF_u$ , %):	88
Equivalent All-Electric Range Energy Consumption ( $EAEREC_u$ , kWh/mi):	3
<b>Highway</b>	
Manufacturer Highway Test #:	2
Charge Depleting Cycle Range ( $R_{cdch}$ , mi):	30
Charge Depleting Actual Range ( $R_{cdah}$ , mi):	25
Charge Depleting to Charge Sustaining Range ( $R_{cdch}$ , mi):	24
All Electric Range ( $AER_h$ , mi):	27
Equivalent All Electric Range ( $EAER_h$ , mi):	26
Equivalent Electric Range Fraction ( $ERF_h$ , %):	77
Equivalent All-Electric Range Energy Consumption ( $EAEREC_h$ , kWh/mi):	4
<b>US06</b>	
All Electric Range ( $AER$ , mi):	6
<b>Urban</b>	

Charge Depleting Net Energy Consumption ( $E_{cd}$ , kWh):	35
Net DC Energy from battery expended during test (kWh):	24
AC energy required to fully charge battery after CS or CD test (kWh):	64
<b>Highway</b>	
Charge Depleting Net Energy Consumption ( $E_{cd}$ , kWh):	54
Net DC Energy from battery expended during test (kWh):	53
AC energy required to fully charge battery after CS or CD test (kWh):	62
CSI 10A Manufacturer Note:	
<b>CSI 10B (All fields in red are considered CBI)</b>	