Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction/ Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
VI-0.5	**Process Code**	Select the desired process code for the current submission.	TestVehicleInformationSubmission/TestVehicleInformationDetails	InformationProcessCode	TRUE	1 per Test Vehicle **Configuration**	A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification Test Data		Manufacturer	Front End	XML	LD-CTD-VI-BR030 **LD-CTD-VI-BR031**	VI-BR.30: If the Process Code **(VI-0.5)** is equal to 'C' (Correction) then this vehicle cannot have any active tests , **for** which there are locked and active Certification Summary Information Reports (CSIs). VI-BR31: If Process Code (VI-0.5) is equal to 'R' (Report) then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration **Number** (VI-3), and Manufacturer Code (VI-1).
VI-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	TestVehicleInformationSubmission/TestVehicleInformationDetails	EPAManufacturerCode	TRUE	1 per Test Vehicle **Configuration**	A(3)	Fixed String	3	3	[A-Z0-9]{3}						Light-Duty	Certification Test Data		Verify	Front end	XML	LD-CTD-VI-BR001 LD-CTD-VI-BR002 LD-CTD-VI-BR005 LD-CTD-VI-BR006 LD-CTD-VI-BR026 LD-CTD-VI-BR027 LD-CTD-VI-BR031	VI-BR1: Manufacturer Code (VI-1) must exist in the system. VI-BR2: If Process Code (VI-0.5) is equal to 'C' (Correction) and **Original Test Vehicle** Model Year (VI-7) is greater than or equal to 2011, then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration **Number** (VI-3), and Manufacturer Code (VI-1). VI-BR5: The Manufacturer Code (VI-1) must match the manufacturer code embedded in the **Original** Test Group **Name** (VI-5). VI-BR6: The Manufacturer Code (VI-1) must match the manufacturer code embedded in the **Original** Evaporative/Refueling Family **Name** (VI-6). VI-BR26: If the Process Code (VI-0.5) is equal to 'R' (Report) the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (VI-1) of the dataset for which the report was requested. VI-BR27: If the Process Code (VI-0.5) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (VI-1) of the submitted dataset. VI-BR31: If Process Code (VI-0.5) is equal to 'R' (Report) then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration **Number** (VI-3), and Manufacturer Code (VI-1).
VI-2	**Vehicle ID**	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle.	TestVehicleInformationSubmission/TestVehicleInformationDetails	VehicleIdentificationText	TRUE	1 per Test Vehicle **Configuration**	A(20)	String	1	20							Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR002 **LD-CTD-VI-BR031**	VI-BR2: If Process Code (VI-0.5) is equal to 'C' (Correction) and Model Year (VI-7) is greater than or equal to 2011, then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration (VI-3), and Manufacturer Code (VI-1). VI-BR31: If Process Code (VI-0.5) is equal to 'R' (Report) then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration **Number** (VI-3), and Manufacturer Code (VI-1).
VI-3	**Vehicle Configuration Number**	A system-generated number that is assigned to each new unique test vehicle configuration. A mfr code, vehicle id, test vehicle configuration number can be used for any test group, evap/refueling family, or model year- not just the values entered into field #s VI-5,VI-6, and VI-7.	TestVehicleInformationSubmission/TestVehicleInformationDetails	VehicleConfigurationNumber	FALSE	1 per Test Vehicle **Configuration**	N(2)	Integer						0	99		Light-Duty	Certification Test Data	If VI-3 NEW then done in DB and do not validate. If CORRECTION/UPDATE then Mfr Code, Vehicle ID, and Vehicle Configuration Number must exist in DB.	Verify if New, otherwise Manufacturer	Backend if New Front end if not New	Assigned if New, otherwise XML	LD-CTD-VI-BR002 LD-CTD-VI-BR028 LD-CTD-VI-BR029 **LD-CTD-VI-BR031**	VI-BR2: If Process Code (VI-0.5) is equal to 'C' (Correction) and Model Year (VI-7) is greater than or equal to 2011, then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration (VI-3), and Manufacturer Code (VI-1). VI-BR28: If the Process Code (VI-0.5) is equal to 'N' (New) then the Vehicle Configuration Number (VI-3) is not allowed. VI-BR29: If the Process Code (VI-0.5) is equal to 'C' (Correction) then the Vehicle Configuration Number (VI-3) is required. VI-BR31: If Process Code (VI-0.5) is equal to 'R' (Report) then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration **Number** (VI-3), and Manufacturer Code (VI-1).
VI-4	**Manufacturer Vehicle Configuration Number**	This optional field may be used by manufacturers to track manufacturers' internal **designations for** configurations. EPA doesn't use this field.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	ManufacturerVehicleConfigurationNumber	FALSE	1 per Test Vehicle **Configuration**	N(2)	Integer						0	99		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-5	**Original Test Group Name**	The actual test group for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	TestGroupName	TRUE	1 per Test Vehicle **Configuration**	A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{3}[A-Z0-9]{4,11}[0-9]{1,6}?						Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR003 LD-CTD-VI-BR005 LD-CTD-VI-BR007 LD-CTD-VI-BR008	VI-BR3: The **Original Test Vehicle** Model Year (VI-7) must match the model year embedded in the **Original** Test Group **Name** (VI-5). VI-BR5: The Manufacturer Code (VI-1) must match the manufacturer code embedded in the **Original** Test Group **Name** (VI-5). VI-BR7: The displacement embedded in the **Original** Test Group **Name** (VI-5) must be a valid number.
VI-6	**Original Evaporative/Refueling Family Name**	The evaporative/refueling family for this test vehicle configuration. Not applicable for diesel vehicles	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	EvaporativeRefuelingFamilyName	FALSE	1 per Test Vehicle **Configuration**	A(12)	Fixed String	12	12	[A-HJ-NPR-TV-Y1-9]{3}[A-Z0-9]{4}[0-9]{3}[A-Z0-9]{0}						Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR004 LD-CTD-VI-BR006 LD-CTD-VI-BR009	VI-BR4: The **Original Test Vehicle** Model Year (VI-7) must match the model year embedded in the **Original** Evaporative/Refueling Family **Name** (VI-6). VI-BR6: The Manufacturer Code (VI-1) must match the manufacturer code embedded in the **Original** Evaporative/Refueling Family **Name** (VI-6). VI-BR9: The canister working capacity embedded in the **Original** Evaporative/Refueling Family **Name** (VI-6) must be a valid number.
VI-7	**Original Test Vehicle Model Year**	The model year for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	ModelYear	TRUE	1 per Test Vehicle **Configuration**	N(4)	Year type (1970-2100)	4	4				1970	2100		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR003 LD-CTD-VI-BR004	VI-BR3: The **Original Test Vehicle** Model Year (VI-7) must match the model year embedded in the **Original** Test Group **Name** (VI-5). VI-BR4: The **Original Test Vehicle** Model Year (VI-7) must match the model year embedded in the **Original** Evaporative/Refueling Family **Name** (VI-6).
VI-8	**Represented test vehicle make**	The **represented** test vehicle make (aka division name) for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	ActualTestVehicleMakeText	TRUE	1 per Test Vehicle **Configuration**	A(20)	String	1	20							Light-Duty	Certification Test Data	**This change must be made on Verify front end and back end web screens**	Manufacturer	Front end	XML		
VI-9	**Represented test vehicle model**	The **represented** test vehicle model (aka carline name) for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleDescriptionDetails	ActualTestVehicleModelText	TRUE	1 per Test Vehicle **Configuration**	A(50)	String	1	50							Light-Duty	Certification Test Data	**This change must be made on Verify front end and back end web screens**	Manufacturer	Front end	XML		
~~DELETE: VI-10~~	~~Vehicle Fuel Category~~	~~Enter the applicable vehicle fuel category for this test vehicle configuration.~~	~~TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails~~	~~VehicleFuelCategoryIdentifier~~	~~FALSE~~	~~TRUE~~	~~A(2)~~	~~Enumeration~~								~~BF= Single Fuel FF= Flex Fuel (fuel grommixed and combusted together) HV= Flex Fuel Hybrid MF= Dual/Multi Fuel (2 or more separate fuel tanks, separate combustion) RF= Bi/Multi Fuel (2 or more separate fuel tanks, combusted together) HV= Hybrid EV= Battery Electric AV= Fuel Cell/Electric PV= Plug In Hybrid~~	~~Light-Duty~~	~~Certification Test Data~~	~~Same as TC 8. Note: By changing this field to FALSE (optional) in the schema, it would not have to totally be deleted from the schema and could still be used for Model Years 2010 and 2011.~~	~~Manufacturer~~	~~Front end~~	~~XML~~	NEW	NEW: If Original Test Vehicle Model Year (VI-7) is less than or equal to '2011', then Vehicle Fuel Category (VI-10) is required else it is not allowed to be submitted when Original Test Vehicle Model Year (VI-7) is greater than '2011'.
NEW: VI-10.5	Drive Source	Enter the applicable value for the drive source for this test vehicle configuration. Select 'E' for fuel cell electric vehicle.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/DriveSourceDetails	DriveSourceIdentifier	TRUE	1...n per Test Vehicle Configuration	A(1)	Enumeration								C = Combustion Engine E = Electric Motor H = Hybrid (Both Combustion Engine and Electric Motor)	Light Duty	Certification Test Data	This field is totally new in VI (however it already exists in the Test Group dataset but the enumeration value of "H-Hybrid" is being deleted in all datasets). For model years <2012, this field should be mapped from other existing fields which is why it is a required field.	Manufacturer	Front End	XML	N/A	N/A

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
NEW: VI-10.6	Hybrid Indicator	Verify assigned based on values selected for Drive Source (VI-10.5)	TestVehicleInformationSubmission/TestVehicleInformationDetails/EPAGenerated/TestVehicleDetails	HybridVehicleIndicator	TRUE	1 per Test Vehicle Configuration	A(1)	Enumeration								N - No Y - Yes	Light Duty	Certification Test Data	NEW BE Verify Assigned Rule: If Drive Source (VI-10.5) is equal to 'Combustion Engine' and 'Electric Motor' then Hybrid indicator (VI-10.6) equals "Yes", otherwise it equals "No". For model years <2012, this field should be mapped from other existing fields which is why it is a required field.	Verify	Back End	Assigned	NEW	
NEW: VI-11.1	Fuel(s)	Enter all applicable fuels for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/DriveSourceDetails	FuelIdentifier	TRUE	1..n per Drive Source per Test Vehicle Configuration	A(3)	Enumeration								G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen ~~BE - Battery Electric~~ ~~EL - Electricity~~ ~~NA - Not applicable~~ HYD - Hydraulic	Light-Duty	Certification Test Data	For model years <2012, this field should be mapped from Fuel1 and Fuel2 fields which is why it is a required field. LD-CTD-VI-BR031: BE Verify Assigned BR - The selected value for Fuel(s) (VI-11.1) is not a valid value.	Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR032 NEW: LD-CTD-VI-BR033 NEW: LD-CTD-VI-BR034 NEW: LD-CTD-VI-BR008 ~~VI-BR13~~	NEW: If Drive Source (VI-10.5) is equal to "Combustion Engine", Fuel (VI-11.1) can not equal "Electricity" NEW: If Drive Source (VI-10.5) is equal to "Electric Motor", Fuel (VI-11.1) must equal "Electricity", "Hydrogen", or "Methanol". NEW: "BE" (Battery Electric) and "NA" (Not Applicable) are not allowable values for Fuel(s) (VI-11.1) ~~VI-BR13~~: "NA" is not a valid value for Fuel 3. It is only valid for Fuel 2.
NEW: VI-11.2	Multiple Fuel Storage-Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together for this test vehicle configuration?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	MultipleFuelStorageMethodIdentifier	FALSE	1 per Test Vehicle Configuration	A(8)	Enumeration								S - Fuels Stored Separately T - Fuels Stored Together	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR035a NEW: LD-CTD-VI-BR035b	NEW: If more than one fuel is selected for Fuel(s) (VI-11.1) and if Drive Source (VI-10.5) equals "Combustion Engine", then Multiple Fuel Storage (VI-11.2) is required, otherwise Multiple Fuel Storage (VI-11.2) is not allowed.
NEW: VI-11.3	Multiple Fuel Combustion-Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together for this test vehicle configuration?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	MultipleFuelCombustionMethodIdentifier	FALSE	1 per Test Vehicle Configuration	A(8)	Enumeration								S- Fuels Combusted Separately T- Fuels Combusted Together	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR036	NEW: If Drive Source (VI-10.5) is equal to "Combustion Engine" and if more than one of the combustible fuels is selected for Fuel(s) (VI-11.1) (Combustible Fuels = Gasoline, Diesel, Methanol, Ethanol, CNG, LNG, LPG), then Multiple Fuel Combustion (VI-11.3) is required and is optional if "Hydrogen" is selected for Fuel(s) (VI-11.1).
NEW: VI-11.4	Fuel Cell Indicator	Is this test vehicle configuration equipped with a Fuel Cell?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	FuelCellIndicator	FALSE	1 per Test Vehicle Configuration	A(1)	Enumeration								N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR037	NEW: If Drive Source (VI-10.5) is equal to "Electric Motor", then Fuel Cell Indicator (VI-11.4) is required, otherwise it is optional.
NEW: VI-11.5	Rechargable Energy Storage System Indicator	Is this test vehicle equipped with a rechargable energy storage system?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	RechargeableEnergyStorageSystemIndicator	FALSE	1 per Test Vehicle Configuration	A(1)	Enumeration								N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR038	NEW: If Drive Source (VI-10.5) is equal to "Electric Motor", then Rechargable Energy Storage System Indicator (VI-11.5) is required, otherwise it is optional.
NEW: VI-11.6	Rechargeable Energy Storage System ~~Device~~	Enter the applicable type of energy storage device for this test group.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	RechargeableEnergyStorageDeviceIdentifier	FALSE	1 per Test Vehicle Configuration	A(2)	Enumeration								B = Battery(s) C = Capacitor ~~BC = Battery and Capacitor~~ ~~H = Hydraulic~~ OT = Other	Light Duty	Certification		Manufacturer	Front End	XML	NEW: LD-CTD-VI-BR039	Required if Drive Source (VI-10.5) equals 'E' (Electric Motor) or if Hybrid Indicator (VI-10.6) equals 'yes' or if Fuel Cell Indicator (VI-11.4) equals 'yes', otherwise not allowed. ~~Required if TG 8 = 'HV', 'EV' or 'FC'.~~
NEW: VI-11.7	Rechargeable Energy Storage System, if Other	Enter a description of the energy storage device for this test group if "other" selected.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	RechargeableEnergyStorageDeviceOtherText	FALSE	1 per Test Vehicle Configuration	A(30)	String	1	30							Light Duty	Certification		Manufacturer	Front End	XML	NEW: LD-CTD-VI-BR040	Required if Rechargeable Energy Storage System (VI-11.6) equals 'Other', otherwise optional.
NEW: VI-11.8	Off-board Charge Capable Indicator	Select "Yes" if this test vehicle configuration is equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	OffBoardChargeCapabilityIndicator	FALSE	1 per Test Vehicle Configuration	A(1)	Enumeration								N - No Y - Yes	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-VI-BR041	NEW: If Drive Source (VI-10.5) is equal to "Electric Motor", then Off-board Charge Capable Indicator (VI-11.8) is required, otherwise it is optional.
~~DELETE: VI-11~~	~~Fuel 1~~	~~Enter the applicable fuel for this test vehicle configuration.~~	~~TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails~~	~~FuelIdentifier~~	~~FALSE~~ ~~TRUE~~		~~A(9)~~	~~Enumeration~~								~~G - Gasoline~~ ~~D - Diesel~~ ~~M - Methanol~~ ~~E - Ethanol~~ ~~CNG - Compressed Natural Gas~~ ~~LNG - Liquified Natural Gas~~ ~~LPG - Liquid Petroleum Gas~~ ~~H - Hydrogen~~ ~~BE - Battery Electric~~ ~~NA - Not applicable~~	~~Light-Duty~~	~~Certification Test Data~~		~~Manufacturer~~	~~Front end~~	~~XML~~	NEW DELETE: ~~VI-BR13~~	NEW: If Original Test Vehicle Model Year (VI-7) is less than or equal to '2011', then Fuel 1 (VI-11) is required, otherwise it is not allowed. ~~'NA' is not a valid value for Fuel 1. It is only valid for Fuel 2.~~
~~DELETE: VI-12~~	~~Fuel 2~~	~~Enter the second fuel if the Test/Veh fuel category= for this test vehicle configuration is flex fuel, flex fuel hybrid, dual fuel, or bi fuel.~~	~~TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails~~	~~FuelIdentifier~~	~~FALSE~~		~~A(9)~~	~~Enumeration~~								~~G - Gasoline~~ ~~D - Diesel~~ ~~M - Methanol~~ ~~E - Ethanol~~ ~~CNG - Compressed Natural Gas~~ ~~LNG - Liquified Natural Gas~~ ~~LPG - Liquid Petroleum Gas~~ ~~H - Hydrogen~~ ~~BE - Battery Electric~~ ~~NA - Not applicable~~	~~Light-Duty~~	~~Certification Test Data~~		~~Manufacturer~~	~~Front end~~	~~XML~~	DELETE: ~~VI-BR13~~	~~Required if "Vehicle Fuel Category" = 'FF', 'FH', 'DF' or 'BF'. Otherwise not allowed.~~
VI-13	Drive Mode While Testing	Enter the applicable test drive code for the way this test vehicle configuration was/is to be tested.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	TestDriveCode	TRUE	1 per Test Vehicle Configuration	A(1)	Enumeration								4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-14	Shift indicator light usage	Enter the applicable shift indicator light usage code. One usage code per test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	ShiftIndicatorLightUsageIdentifier	TRUE	1 per Test Vehicle Configuration	A(1)	Enumeration								1 - Not equipped 2 - Equipped, not shifted by SIL 3 - Equipped, shifted by SIL 5 - Equipped, shifted by survey schedule.	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-15	Aged emission component usage	Enter the age of the emission control system components (in thousands of miles) or enter '4 = No aged components' if this test vehicle configuration does not have aged components.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	AgedComponentUsageIdentifier	TRUE	1 per Test Vehicle Configuration	A(3)	Enumeration								4 = No aged components, 4k emission or fuel economy data vehicle was used 50 = 50k aged components used on test vehicle 100 = 100k 120 = 120k 150 = 150k	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-16	Odometer correction – initial	Enter the applicable initial odometer correction.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/OdometerCorrectionDetails	CorrectionInitialValue	TRUE	1 per Test Vehicle Configuration	N(7,1)	Decimal				7	1	0.0	999999.9		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-17	Odometer correction factor	Enter the multiplicative odometer correction factor.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/OdometerCorrectionDetails	CorrectionFactorValue	TRUE	1 per Test Vehicle Configuration	N(5,4)	Decimal				5	4	0.0	9.9999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-18	Odometer correction sign	Enter the odometer correction sign- plus or minus.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/OdometerCorrectionDetails	CorrectionSignIdentifier	TRUE	1 per Test Vehicle Configuration	A(1)	Enumeration								'+' = System Miles= (Test odometer reading *Correction factor) + Initial system miles. '-' = System miles = (Test odometer reading - initial system miles) * Correction factor.	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-19	Odometer Correction units code	Enter the applicable units for the odometer correction factor- miles or kilometers.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/OdometerCorrectionDetails	CorrectionUnitsCode	TRUE	1 per Test Vehicle Configuration	A(1)	Enumeration								M =Miles K = Kilometers	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-20	Engine Code	Enter the applicable engine code assigned by the manufacturer for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	EngineCodeText	TRUE	1 per Test Vehicle Configuration	A(14)	String	1	14							Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-21	Rated horsepower	Enter the applicable rated horsepower for this test vehicle configuration. Reference SAE J2723 and SAE J1349.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	EngineRatedHorsePowerValue	TRUE	1 per Test Vehicle Configuration	N(4)	Integer						1	9999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-22	Displacement	Enter the applicable engine displacement in liters for this test vehicle configuration. In Liters.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	EngineDisplacementValue	TRUE	1 per Test Vehicle Configuration	N(5,3)	Decimal				5	3	0.001	99.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-23	Air Aspiration Method	Enter the applicable air aspiration method for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/AirAspirationDetails	AirAspirationMethodIdentifier	TRUE	1 per Test Vehicle Configuration	A(2)	Enumeration								NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue = Certification Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
VI-24	**Air Aspiration Method if Other**	Enter a description of the air aspiration method if "other" is selected for Air Aspiration Method.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/AirAspirationDetails	AirAspirationMethodOtherText	FALSE	**1 per Test Vehicle Configuration**	A(30)	String	1	30							Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR013	VI-BR13: If Air Aspiration Method (VI-23) is equal to 'OT' (Other) then Air Aspiration Method If Other (VI-24) is required, otherwise it is not allowed.
VI-25	**Number of Air Aspiration Devices**	If not naturally aspirated, enter the number of Air Aspiration Devices. Default is "0".	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/AirAspirationDetails	AirAspirationDeviceCount	FALSE	**1 per Test Vehicle Configuration**	N(2)	Integer						0	99		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR014 LD-CTD-VI-BR015 LD-CTD-VI-BR017 LD-CTD-VI-BR018	VI-BR14: If Air Aspiration Method (VI-23) is equal to 'TC' (Turbocharged), 'SC' (Supercharged), 'TS' (Turbo and Supercharged) or 'OT' (Other), then Number of Air Aspiration Devices (VI-25) is required, otherwise it must be equal to '0' if present. VI-BR15: If Air Aspiration Method (VI-23) is not equal to 'NA' (Naturally Aspirated), then Number of Air Aspiration Devices (VI-25) is required and cannot be equal to '0'. VI-BR17: If Air Aspiration Device Configuration (VI-26) is equal to 'N' (Single), then Number of Air Aspiration Devices (VI-25) must be '1'. VI-BR18: If Air Aspiration Device Configuration (VI-26) is not equal to 'N' (Single), then Number of Air Aspiration Devices (VI-25) must be greater than '1', if present.
VI-26	**Air Aspiration Device Configuration**	Enter the applicable air aspiration device configuration for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/AirAspirationDetails	AirAspirationConfigurationIdentifier	FALSE	**1 per Test Vehicle Configuration**	A(2)	Enumeration								N=Single P=Parallel S=Series PS=Both Parallel and Series	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR016	VI-BR16: If Air Aspiration Method (VI-23) is equal to 'TC' (Turbocharged), 'SC' (Supercharged), 'TS' (Turbo and Supercharged) or 'OT' (Other), then Air Aspiration Device Configuration (VI-26) is required, otherwise it is not allowed.
VI-27	**Charge Air Cooler Type**	Enter the applicable charge air cooler (also known as inter-cooler) type for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	ChargeAirCoolerIdentifier	FALSE	**1 per Test Vehicle Configuration**	A(1)	Enumeration								A=Air L=Liquid N=N/A	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR025	VI-BR25: If Air Aspiration Method (VI-23) is not equal to 'NA' (Naturally Aspirated), then Charge Air Cooler Type (VI-27) is required.
VI-28	**Emission Control Device Comments**	Enter any additional comments about the emission control devices installed on this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	EmissionsControlDeviceCommentsText	FALSE	**1 per Test Vehicle Configuration**	A(1000)	String	1	1000							Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-29	**Curb weight**	Enter the curb weight in pounds for this test vehicle configuration. Curb weight is defined as the actual or mfr's estimated weight of the vehicle in operational status with all standard equipment and weight of fuel at nominal tank capacity and the weight of optional equipment computed in accordance with CFR86.082-24.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleSpecificationsDetails	CurbWeightValue	TRUE	**1 per Test Vehicle Configuration**	N(5)	Integer						0	14000		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR019 LD-CTD-VI-BR020	VI-BR19: Equivalent Test Weight (VI-30) must be greater than Curb Weight (VI-29). VI-BR20: Gross Vehicle Weight Rating (VI-33) must be greater than Curb Weight (VI-29).
VI-30	**ETW**	Enter the ETW, equivalent test weight, in pounds for this test vehicle configuration. ETW is defined as the weight within an inertia weight class which is used in the dynometer testing of a vehicle and which is based on its loaded vehicle weight or adjusted loaded vehicle weight in accordance with the provisions of CFR86.1803-01.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleSpecificationsDetails	EquivalentTestWeightValue	TRUE	**1 per Test Vehicle Configuration**	N(5)	**Enumeration** ~~Integer~~						0	14000	**1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000**	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR019	VI-BR19: Equivalent Test Weight (VI-30) must be greater than Curb Weight (VI-29).
VI-31	**ALVW**	Enter the adjusted, loaded vehicle weight in pounds for this test vehicle configuration. ALVW is defined as the average of the vehicle curb weight and gross vehicle weight rating in accordance with the provisions of CFR86.1803-01.	TestVehicleInformationSubmission/TestVehicleInformationDetails/EPAGeneratedTestVehicleDetails		FALSE	**1 per Test Vehicle Configuration**	N(5)	Integer					AdjustedLoadedVehicleWeight	0	14000		Light-Duty	Certification Test Data	This field should be system generated. ALVW is defined as the average of the vehicle curb weight and the gross vehicle weight.	Verify	Backend	Assigned		
VI-32	**LVW**	The loaded vehicle weight in pounds will be calculated by Verify for this test vehicle configuration. LVW is defined as the vehicle curb weight plus 300 pounds.	TestVehicleInformationSubmission/TestVehicleInformationDetails/EPAGeneratedTestVehicleDetails		FALSE	**1 per Test Vehicle Configuration**	N(5)	Integer					LoadedVehicleWeight	0	14000		Light-Duty	Certification Test Data	This field should be system generated. LVW is defined as the vehicle curb weight + 300 pounds.	Verify	Backend	Assigned		
VI-33	**Gross vehicle weight rating (GVWR)**	Enter the gross vehicle weight in pounds for this test vehicle configuration. Gross vehicle weight is defined as the value specified by the mfr as the maximum design loaded weight of a single vehicle.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleSpecificationsDetails	GrossVehicleWeightRatingValue	FALSE	**1 per Test Vehicle Configuration**	N(5)	Integer						0	14000		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR020	VI-BR20: Gross Vehicle Weight Rating (VI-33) must be greater than Curb Weight (VI-29).
VI-34	**N/V Ratio**	Enter the applicable N/V ratio for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleSpecificationsDetails	NVRatioValue	TRUE	**1 per Test Vehicle Configuration**	N(4,1)	Decimal				4	1	0.0	999.9		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-35	**Axle Ratio**	Enter the axle ratio for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/VehicleSpecificationsDetails	AxleRatioValue	TRUE	**1 per Test Vehicle Configuration**	N(3,2)	Decimal				3	2	0.00	9.99		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-36	**Transmission Type**	Enter the transmission type for this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TransmissionSpecificationsDetails	LightDutyTransmissionTypeIdentifier	TRUE	**1 per Test Vehicle Configuration**	A(3)	Enumeration								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT = Continuously Variable **SCV=Selectable Continuously Variable (e.g. CVT with paddles)** **OT = Other**	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR023 LD-FE-GL-BR093 LD-CTD-VI-BR021	VI-BR23: If Creeper Gear (VI-39) is equal to 'Y' (Yes), then Transmission Type (VI-36) must be equal to 'M' (Manual). VI-BR093: (Warning only, label should be accepted) If the Transmission Type (GL-67) equals 'A', 'M', or 'CVT', then the vehicle used for each test entered for that label should have the same Transmission Type (VI-36). VI-BR021: If Transmission Type (VI-36) is equal to 'OT' (Other), then Transmission Type Other Description (VI-37) is required.
VI-37	**Transmission Type, if "Other" ~~Description~~**	Enter a description of the transmission type if "Other" is selected.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TransmissionSpecificationsDetails	LightDutyTransmissionTypeOtherText	FALSE	**1 per Test Vehicle Configuration**	A(30)	String	1	30							Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR021	VI-BR21: If Transmission Type (VI-36) is equal to 'OT' (Other), then Transmission Type Other Description (VI-37) is required.
VI-38	**Transmission Lockup**	Is the transmission on this test vehicle configuration equipped with lockup?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TransmissionSpecificationsDetails	TransmissionLockupIndicator	TRUE	**1 per Test Vehicle Configuration**	A(1)	Enumeration								Y=Yes N=No	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR022	VI-BR22: If Transmission Type (VI-36) is equal to 'M', then Transmission Lockup (VI-38) must be equal to 'N' (No).
VI-39	**Creeper Gear**	Is the transmission on this test vehicle configuration equipped with a creeper gear?	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TransmissionSpecificationsDetails	TransmissionCreeperGearIndicator	TRUE	**1 per Test Vehicle Configuration**	A(1)	Enumeration								Y=Yes N=No	Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-40	**Number of Transmission Gears**	Enter the number of transmission gears on this test vehicle configuration. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TransmissionSpecificationsDetails	TransmissionGearCount	TRUE	**1 per Test Vehicle Configuration**	N(2)	Integer						1	99		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-VI-BR024	VI-BR24: If Transmission Type (VI-36) is equal to 'CVT' (Continuously Variable), then Number of Transmission Gears (VI-40) must be equal to '1'.
VI-40.5	**Test Procedure Dynamometer Coefficients Category**	Select all applicable test procedure dynamometer coefficients categories for which target and set coefficients must be specified for this test vehicle (FTP/Hwy, Cold CO, and/or US06). Note- Target and set coefficients must be entered for each selected test procedure.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	TestProcedureDynamometerCoefficientsCategory	TRUE	**1..*n per Test Vehicle Configuration**	A(7)	Enumeration								(Need to change the enumeration list in the schema.) C=H-E = City/Highway/Evap Cold-CO = Cold CO US06 = US06	Light-Duty	Certification Test Data	Need to add a column to the test procedure table that will be used to cross reference each test procedure to the 3 test procedure dyno coefficients categories. This will be used for EPA confirmatory testing to select the correct target and set coefficients depending on which test procedure is going to be conducted by the lab.	Manufacturer	Front end	XML		
VI-41	**Target Coefficient A**	Enter the target A-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lbf)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	TargetCoefficientAValue	TRUE	**1..# of selected test procedures per Test Vehicle Configuration**	N(6,3)	Decimal				6	3	-1000	999.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-42	**Target Coefficient B**	Enter the target B-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lbf/mph)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	TargetCoefficientBValue	TRUE	**1..# of selected test procedures per Test Vehicle Configuration**	N(6,5)	Decimal				6	5	-10	9.99999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
VI-43	Target Coefficient C	Enter the target C-term coefficient from test track force vs. velocity equation for this test vehicle configuration. (lb/(mph**2)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	TargetCoefficientCValue	TRUE	1..# of selected test procedures per Test Vehicle Configuration	N(7,6)	Decimal				7	6	-10	9.999999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-43.5	EPA-Calculated Total Road Load Horsepower (for C-H-E Coefficients)	Verify calculated total road load horsepower (TRLHP50) based on C-H-E target coefficients	TestVehicleInformationSubmission/TestVehicleInformationDetails/EPACalculatedTestVehicleDetails	TotalRoadLoadHorsepowerValue	FALSE	1 per Test Vehicle Configuration	N(3,1)	Decimal				3	1	0	99.9		Light Duty	Certification Test Data	Verify will use the following equations for CityHighwayEvap Coefficients: Total Road Load Horsepower = (A + 50xB + 2500xC) / 7.5 Where: A=Target Coefficient A (VI-41), B=Target Coefficient B (VI-42), C=Target Coefficient C (VI-43) ASTM Rounded to 1 decimal place	Verify	Back End		LD-CTD-VI-BR042	If Test Procedure Dynamometer Coefficients Category (VI-40.5) = "C-H-E" (CityHighwayEvap) then EPA-Calculated Total Road Load Horsepower (VI-43.5) is required, otherwise not allowed.
VI-44	Set Coefficient A	EPA derived or manufacturer supplied set A-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lbf)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	SetCoefficientAValue	TRUE	1..# of selected test procedures per Test Vehicle Configuration	N(6,3)	Decimal				6	3	-1000	999.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-45	Set Coefficient B	EPA derived or manufacturer supplied set B-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lb/(mph)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	SetCoefficientBValue	TRUE	1..# of selected test procedures per Test Vehicle Configuration	N(6,5)	Decimal				6	5	-10	9.99999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-46	Set Coefficient C	EPA derived or manufacturer supplied set C-term coefficient from dynamometer force vs. velocity equation for this test vehicle configuration. (lb/(mph**2)	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails/TargetSetCoefficientDetails	SetCoefficientCValue	TRUE	1..# of selected test procedures per Test Vehicle Configuration	N(7,6)	Decimal				7	6	-10	9.999999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML		
VI-47	Test vehicle comments	Enter any additional comments about this test vehicle configuration.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	ManufacturerCommentText	FALSE	1 per Test Vehicle Configuration	A(1000)	String	1	1000							Light-Duty	Certification Test Data		Manufacturer	Front end	XML		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Fuel Properties		**Not required for test fuel type equal to diesel, hydrogen or electric.**																						
FP-0.5	**Process Code**	Select the desired process code for the current submission.	FuelPropertiesSubmission/FuelPropertiesInformationDetails	InformationProcessCode	TRUE		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification Test Data		Manufacturer	Front End	XML	LD-CTD-FP-BR021 LD-CTD-FP-BR023	FP-BR21: If the Process Code (FP-0.5) is equal to 'C' (Correction) then ~~the~~ there cannot be any active test~~s~~, which reference these fuel properties, that are included ~~which there are~~ in any locked ~~and active~~ Certificate Summary Information Reports (CSIs)~~which reference these fuel properties~~. FP-BR23: If Process Code (FP-0.5) is equal to 'C' (Correction) then tehre cannot be an active Test Information Dataset with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1).
FP-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. For mfr tests- this will be derived from user's CDX user account. Otherwise, it will come from LOD Test Report data.	FuelPropertiesSubmission/FuelPropertiesInformationDetails	EPAManufacturerCode	TRUE		A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light-Duty	Certification Test Data		Verify	Front end	XML	LD-CTD-FP-BR001 LD-CTD-FP-BR002a LD-CTD-FP-BR002b LD-CTD-FP-BR019 LD-CTD-FP-BR020 LD-CTD-FP-BR022 LD-CTD-FP-BR023	FP-BR1: Manufacturer Code (FP-1) must exist in the system. FP-BR2: If Process Code (FP-0.5) is equal to 'R' (Report) or 'C' (Correction) then a record must already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR19: If the Process Code (FP-0.5) is equal to 'R' (Report) the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (FP-1) of the dataset for which the report was requested. FP-BR20: If the Process Code (FP-0.5) is equal to 'N' (New) or 'C' (Correction) the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (FP-1) of the dataset for which the report was requested. FP-BR22: If the Process Code (FP-0.5) is equal to 'N' (New) then a record cannot already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR23: If Process Code (FP-0.5) is equal to 'C' (Correction) then there cannot be an active Test Information Dataset with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1).
FP-2	**Fuel batch ID**	Enter the assigned fuel batch ID for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails	FuelBatchIdentifier	TRUE		A(6)	String	1	6							Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-FP-BR002a LD-CTD-FP-BR002b LD-CTD-FP-BR022 LD-CTD-FP-BR023	FP-BR2: If Process Code (FP-0.5) is equal to 'R' (Report) or 'C' (Correction) then a record must already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR22: If the Process Code (FP-0.5) is equal to 'N' (New) then a record cannot already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR23: If Process Code (FP-0.5) is equal to 'C' (Correction) then there cannot be an active Test Information Dataset with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1).
FP-3	**Fuel calibration number**	Enter the fuel calibration number for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails	FuelCalibrationNumber	TRUE		N(4)	Integer						1	9999		Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML	LD-CTD-FP-BR002a LD-CTD-FP-BR002b LD-CTD-FP-BR022 LD-CTD-FP-BR023	FP-BR2: If Process Code (FP-0.5) is equal to 'R' (Report) or 'C' (Correction) then a record must already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR22: If the Process Code (FP-0.5) is equal to 'N' (New) then a record cannot already exist in the system with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1). FP-BR23: If Process Code (FP-0.5) is equal to 'C' (Correction) then there cannot be an active Test Information Dataset with the same Fuel Batch ID (FP-2), Fuel Batch Calibration Number (FP-3), and Manufacturer Code (FP-1).
FP-4	**Test Fuel Type**	Select the applicable test fuel type for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelIdentificationDetails	TestFuelTypeIdentifier	TRUE		N(2)	Enumeration								6 = EPA UNLEADED GASOLINE 7 = INDUSTRIAL UNLEADED 100 OCTANE 8 = NUMBER 1 FUEL OIL 9 = CERT DIESEL 300 PPM SULFUR 10 = NATURAL GAS 19 = CERT DIESEL 7-15 PPM SULFUR 22 = SPECIAL UNLEADED 91 RON 23 = CARB PHASE II GASOLINE 24 = COLD CO REGULAR (CERT) 25 = COLD CO PREMIUM (CERT) 26 = COLD CO REGULAR (TIER 2) 27 = COLD CO PREMIUM (TIER 2) 31 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 41 = CNG 42 = LPG 43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 50 = HYDROGEN 61 = TIER 2 CERT GASOLINE 62 = ELECTRICITY 71 = E100 (100% ETHANOL)	Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML		
FP-5	**Fuel batch calibration effective date**	Enter the calibration effective date for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelIdentificationDetails	BatchCalibrationEffectiveDate	TRUE		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty	Certification Test Data	YYYYMMDD	Manufacturer/ LOD	Front end	XML		
FP-6	**Fuel batch calibration ineffective date**	Enter the calibration ineffective date for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelIdentificationDetails	BatchCalibrationInEffectiveDate	FALSE		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML		
FP-7	**Fuel batch calibration date**	Enter the calibration date for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelIdentificationDetails	BatchCalibrationDate	TRUE		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty	Certification Test Data		Manufacturer/ LOD	Front end	XML		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Fuel Properties		**Not required for test fuel type equal to diesel, hydrogen or electric.**																						
FP-8	**Carbon weight fraction NMHC**	Enter the carbon weight fraction NMHC for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails/CarbonWeightFractionDetails	FractionNMHCMeasure	FALSE		N(4,3)	Decimal				4	3	0.7	0.9	0.700-0.900 Natural Gas - CWF_{NMHC}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR3~~	~~FP-BR3: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (te Fuel Type equals '10' (Natural Gas) or '41' (Compressed Natural Gas)) then Carbon Weight Fraction NMHC (FP-8) is required t obe between 0.0 and 0.900.~~ This rule is now disabled.
FP-9	**Carbon weight fraction HC**	Enter the carbon weight fraction HC for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails/CarbonWeightFractionDetails	FractionHCMeasure	FALSE		N(4,3)	Decimal				4	3	0.7	0.9	0.700-0.900 Natural Gas - $CWF_{HC/NG}$	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR4~~	~~FP-BR4: If Test Fuel Type (FP-4) is equal to '10' (Natural Gas) or '41' (Compressed Natural Gas) then Carbon Weight Fraction HC (FP-9) is required to be between 0.680 and 0.900.~~This rule is now disabled.
FP-10	**Exhaust carbon weight fraction**	Enter the exhaust carbon weight fraction for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails/CarbonWeightFractionDetails	ExhaustFractionMeasure	FALSE		N(4,3)	Decimal				4	3	0.8 or 0.0	1.0	0.800-1.000 (Methanol) Methanol - CWF_{exHC} 0.800-1.000 (Methanol blend) Methanol blend - CWF_{exHC} 0.800-1.000 (California Phase II) California Phase II - CWF_{exHC} 0.000-1.000 - California Phase II - CWF_{exHC}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML		
FP-11	**Fuel methanol volume fraction**	Enter the fuel methanol volume fraction for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails	MethanolVolumeFractionMeasure	FALSE		N(4,3)	Decimal				4	3	0.0	1.0	0.000-1.000 (Methanol) Methanol 0.000-1.000 (Methanol blend) Methanol blend.	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR5~~	~~FP-BR5: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (Natural Gas) (Methanol or Methanol Blend) then Fuel Methanol Volume Fraction (FP-11) is requird to be between 0.000 and 1.000~~This rule has been deleted.
FP-12	**Fuel density**	Enter the fuel density for this fuel batch. Units are grams/cu. Ft.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails	FuelDensityMeasure	FALSE		N(5,3)	Decimal				5	3	1.0	40.0	Units are grams/cu. Ft. for gaseous fuels 1.000-40.00 (Natural Gas) Natural Gas - D_{NG} Natural Gas (Dual Fue) - D_{NG}, D_{alt}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR6~~	~~FP-BR6: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (Test Fuel Type equals '10' (Natural Gas) or '41' (Compressed Natural Gas)) then Fuel Density (FP-12 is required to be between 15.0 and 25.0 gm/cu. Ft.~~ This rule has been disabled.
FP-13	**Fuel specific gravity**	Enter the fuel specific gravity for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails	SpecificGravityMeasure	FALSE		N(4,3)	Decimal				4	3	Min of set	Max of set	0.719-0.770 (Gasoline) Gasoline - SG California Phase II - Sg_{blend} 0.844-0.882 (Diesel) Diesel - NOT REQUIRED 0.790-0.800 (Methanol) Methanol - SG 0.740-0.790 (Methanol blend) Methanol blend - SG 0.723 -0.750 (California Phase II) California Phase II - Sg_{blend}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR7~~ ~~FP-BR8~~ ~~FP-BR9~~	~~FP-BR7: If Test Fuel Type (FP-4) has a Fuel Category equal to 'G' (Gasoline) (Test Fuel Type equals 1, 6, 7, 22, 23, 24, 25, 26, 27, or 61) then Fuel Specific Gravity (FP-13) is rquired to be between 0.700 and 0.790.~~ This rule has been disabled. ~~FP-BR8: If Test Fuel Type (FP-4) has a Fuel Category equal to 'D' (Diese (Test Fuel Type equals 9 or 19) then Fuel Specific Gravit (FP-13) is required to be between 0.930 and 0.870, however, it is not required that it be submitted.~~ This rule is now disabled. ~~FP-BR9: IF Test Fuel Type (FP-4) is equal to '23' (California Phase II Gasoline), then Fuel Specific Gravity (FP-13) is required to be between 0.723 and 0.790.~~ This rule has been disabled.
FP-14	**Fuel net heating value**	Enter the fuel net heating value for this fuel batch**in BTU/pound.**	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails	NetHeatingValue	FALSE		N(6)	Integer						Min of set	Max of set	Units are BTU/Pound 018284-019000 (Gasoline) Gasoline - NHV Gasoline (dual fuel) - NHV, NHV_{gas} NHV_{alt} 018300-01900 0 (Diesel) Diesel (single fuel) - NOT REQUIRED Diesel (dual fuel) - NHV_{part} 008000-009000 (Methanol) Methanol (single fuel) - NOT REQUIRED Methanol (dual fuel) - NHV_{alt} 008000-009000 (Methanol blend) Methanol blend (single fuel) - NOT REQUIRED Methanol blend (dual fuel) - NHV_{alt}, NHV_{DI} 020000-040000 (Natural Gas) Natural Gas (single fuel) - NOT REQUIRED Natural Gas (dual fuel) - NHV_{alt} 017000-019000 (California Phase II) California Phase II - NHV_{blend}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR10~~ ~~FP-BR11~~ ~~FP-BR12~~ ~~FP-BR13~~	~~FP-BR10: If Test Fuel Type (FP 4 has a Fuel Category equal to 'G' (Gasoline) (Test Fuel Type equals 1, 6, 7, 22, 23, 24, 25, 26, 27, or 61) then Fuel Net Heating Value (FP-14) is required to be between 18200 and 19000 Btu/lb.~~ This rule has been disabled. ~~FP-BR11: If Test Fuel Type (FP-4) has a Fuel Category equal to 'D' (Diesel) (Test Fuel Type equals 9 or 19) then Fuel Net Heating Value (FP-14) is required to be between 18300 and 19000 Btu/lb~~This rule has been disabled. ~~FP-BR12: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (Test Fuel Type equals '10' (Natural Gas) or '41' (Compressed Natural Gass)) then Fuel Net Heating Value (FP-14) is required to be between 19000 and 25000 Btu/lb.~~ This rule has been disabled. ~~FP-BR13: If Test Fuel Type (FP-4) is equal to '23' (California Phase II) then Fuel Net Heating Value (FP-14) is requrid to be between 17500 and 19000 Btu/lb.~~ This rule has been disabled.
FP-15	**Fuel blend carbon weight fraction**	Enter the fuel blend carbon weight fraction for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails/CarbonWeightFractionDetails	BlendFractionMeasure	FALSE		N(4,3)	Decimal				4	3	Min of set	Max of set	0.835-0886 (Gasoline) Gasoline - CWF 0.864-0873 (Diesel) Diesel - NOT REQUIRED 0.3745-0.880 (Methanol blend) Methanol blend - CWF 0.839-0844 (California Phase II) California Phase II - CWF_{Blend} 0.650-0770 (Natural gas) Natural gas - CWF_{NG} 0.835-0886 (Gasoline) Gasoline - CWF California Phase II - CWF_{Blend}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR14~~ ~~FP-BR15~~ ~~FP-BR16~~ ~~FP-BR17~~	~~FP-BR14: If Test Fuel Type (FP-4) has a Fuel Category equal to 'G' (Gasoline) (Test Fuel Type equals 1, 6, 7, 22, 23, 24, 25, 26, 27, or 61) then Fuel Blend Carbon Weight Fraction (FP-15) is required to be between 0.835 and 0.886.~~This rule is now disabled. ~~FP-BR15: If Test Fuel Type (FP-4) has a Fuel Category equal to 'D' (Diesel) (Test Fuel Type equals 9 or 19) then Fuel Blend Carbon Weight Fraction (FP-15) is required to be between 0.850 and 0.875.~~This rule is now disabled. ~~FP-BR16: If Test Fuel Type (FP-4) is equal to '23' (California Phase II Fas) then Fuel Blend Carbon Weight Fraction (FP-15) is required to be between 0.820 and 0.845.~~ This rule is now disabled. ~~FP-BR17: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (Compressed Natural Gas) (Test Fuel Type equals '10' (Natural Gas) or '41' (Compressed Natural Gas)) then Fuel Blend Carbon Weight Fraction (FP-15) is required to be between 0.650 and 0.770~~This rule is now disabled.
FP-16	**Weight fraction CO2**	Enter the CO2 weight fraction for this fuel batch.	FuelPropertiesSubmission/FuelPropertiesInformationDetails/FuelSpecificationsDetails/CarbonWeightFractionDetails	FractionCO2Measure	FALSE		N(4,3)	Decimal				4	3	0.0	0.3	0.000-0.300 Natural Gas - WF_{NG}	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~FP-BR18~~	~~FP-BR18: If Test Fuel Type (FP-4) has a Fuel Category equal to 'CNG' (Test Fuel Type equals '10' (Natural Gas) or '41' (Compressed Natural Gas)) then Weight Fraction CO2 (FP-16) is required to be between 0.000 and 0.300.~~ This rule is now disabled.

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue=Misc Certificaton Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collecti on Point	Collection Type	Applicable Business Rules	Validation Rules
TI-0.5	**Process Code**	Select the desired process code for the current submission.	TestInformationSubmission/TestInformationDetails	InformationProcessCode	TRUE	1 per test	A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification Test Data		Manufacturer /LOD	Front End	XML	LD-CTD-TI-BR027	TI-BR27: If Process Code (TI-0.5) is equal to 'C' then there cannot be any locked and active Certificate Summary Information Reports (CSIs) which reference this test.
TI-1	**Test Number**	A unique number assigned by Verify to identify this set of test info and results. Character 1 is Model Year, Characters 2 - 4 Manufacturer code, characters 5 -12 sequential test number. For the sequential test number, if it begins with 9 its an EPA test any other number is a manufacturer test.	TestInformationSubmission/TestInformationDetails	TestNumberIdentifier	FALSE	1 per test	A(12)	Fixed String									Light-Duty	Certification Test Data		Verify if New, otherwise Manufacturer	Back-end if New Front end if not New	Assigned if New, otherwise XML	LD-CTD-TI-BR002a LD-CTD-TI-BR002b LD-CTD-TI-BR030 LD-CTD-TI-BR031 ~~LD-CTD-TI-BR036~~	TI-BR2: If Process Code (TI-0.5) is equal to 'C' (Correction) and the Original Model Year (VI-7) of the associated vehicle is greater than or equal to 2011, then the Test Number (TI-1) is required and a corresponding record must already exist in the system. TI-BR30: IF Process Code (TI-0.5) is equal to 'R' (Report) then Test Number (TI-1) is required and a corresponding record must already exist in the system. TI-BR31: If Process Code (TI-0.5) is equal to 'N' (New) then Test Number (TI-1) is not allowed. TI-BR36: If the submitter's Manufacturer Code (TI-3) is equal to 'LOD' and Process Code (TI-0.5) is equal to 'C' (Correction) ~~and~~ then Test Number (TI-1) is required and a corresponding record must already exist in the system.
TI-2	**LOD Test Number**	For EPA confirmatory tests- a unique number assigned by LOD to identify this set of test info and results. This field will be left blank for manufacturer tests.	TestInformationSubmission/TestInformationDetails	LODTestNumberText	FALSE	1 per test	A(20)	String	1	20							Light-Duty	Certification Test Data		LOD	Front end	XML	LD-CTD-TI-BR004	TI-BR4: If the submitter's Manufacturer Code (TI-3) is not equal to 'LOD' then LOD Test Number (TI-2) is not allowed.
TI-3	**Manufacturer code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. For mfr tests- this will be derived from user's CDX user account. Otherwise, it will come from LOD Test Report data.	TestInformationSubmission/TestInformationDetails	EPAManufacturerCode	TRUE	1 per test	A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light-Duty	Certification Test Data		Verify/ LOD	Front end	XML	LD-CTD-TI-BR001 LD-CTD-TI-BR003 LD-CTD-TI-BR017 ~~TI-BR18~~ LD-CTD-TI-BR029	TI-BR1: Manufacturer Code (TI-3) must exist in the system. TI-BR3: If Process Code (TI-0) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code (TI-3), Vehicle ID (TI-4), and Vehicle Configuration (TI-5) must match to an active vehicle currently in the system. TI-BR17: If the Process Code (TI-0.5) is equal to 'R' (Report) the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (TI-3) of the dataset for which the report was requested. TI-BR29: If the Process Code (TI-0.5) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (TI-3) of the submitted dataset unless the submitter is LOD.
TI-4	**Vehicle ID**	Enter the unique alphanumeric identifier for the tested vehicle previously established in Test Vehicle Information.	TestInformationSubmission/TestInformationDetails	VehicleIdentificationText	TRUE	1 per test	A(20)	String	1	20							Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR003	TI-BR3: If Process Code (TI-0) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code (TI-3), Vehicle ID (TI-4), and Vehicle Configuration (TI-5) must match to an active vehicle currently in the system.
TI-5	**Vehicle Configuration #**	Enter the vehicle configuration number for the tested vehicle previously established in Test Vehicle Information.	TestInformationSubmission/TestInformationDetails	VehicleConfigurationNumber	TRUE	1 per test	N(2)	Integer						0	99		Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR003	TI-BR3: If Process Code (TI-0) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code (TI-3), Vehicle ID (TI-4), and Vehicle Configuration (TI-5) must match to an active vehicle currently in the system.
TI-6	**Test date**	Enter the date on which the test was conducted.	TestInformationSubmission/TestInformationDetails/TestDataDetails	TestDate	TRUE	1 per test	D(8)	Date			[1-2]{1}[0-9]{3}-[0-1]{1}[0-9]{1}-[0-3]{1}[0-9]{1}						Light-Duty	Certification Test Data	YYYYMMDD	Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR005	TI-BR5: Test Date (TI-6) must be earlier than or equal to the Submit Date (as determined by the system).
TI-7	~~Verify Test Lab ID~~ ~~Mfr Test lab site code~~	Enter the applicable manufacturer test lab site code that was previously established as part of Manufacturer Information.	TestInformationSubmission/TestInformationDetails/TestDataDetails	TestLaboratorySiteCode	FALSE	1 per test	N(2)	Integer						1	99		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	LD-CTD-TI-BR006 ~~TI-BR7~~	TI-BR6: If the submitters Manufacturer Code (TI-3) is equal to 'LOD' then Manufacturer Test Lab Site Code (TI-7) is not allowed, otherwise it is required. ~~TI-BR7: Test lab site code must belong to the mfr code of submitter's user profile or to one of the alternate mfr codes for that mfr~~ (this rule was previously deleted)
TI-8	**Test Procedure**	Enter the applicable test procedure for the test currently being submitted.	TestInformationSubmission/TestInformationDetails/TestDataDetails	TestProcedureIdentifier	TRUE	1 per test	N(2)	Enumeration								2 = CVS 75 AND LATER (MID CAN. LOAD) 3 = HWFM (HIGHWAY TEST) 22 = EVA CO 23 = COLD CO 24 = SFTP/NCA TEST ~~25 = RED FUEL 2 DAY EVAP (BUTANE LOAD)~~ ~~26 = RED FUEL 2 DAY EVAP (BUTANE)~~ ~~28 = RED FUEL REFUEL (DRIVE) (BUTANE)~~ ~~29 = CA FUEL 2 DAY EVA (BUTANE LOAD)~~ ~~47 = CA FUEL 2 DAY EVAP (BUTANE LOAD)~~ ~~30 = RED FUEL 3 DAY EVA (BUTANE LOAD)~~ ~~32 = RED FUEL RUNNING LOSS~~ ~~33 = RED FUEL 3 DAY EVAP(BUTANE LOAD)~~ ~~35 = CA FUEL 3 DAY EVA (BUTANE LOAD)~~ ~~37 = CA FUEL RUNNING LOSS~~ ~~39 = CA FUEL 3 DAY EVAP (BUTANE LOAD)~~ ~~41 = RED FUEL 2 DAY EVA(HEAT TO LOAD)~~ ~~43 = RED FUEL 2DAY EVAP(HEAT TO LOAD)~~ ~~44 = RED REFUEL (DRIVE) (HEAT TO LOAD)~~ ~~45 = CA FUEL 2 DAY EVA (HEAT TO LOAD)~~ ~~47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD)~~ ~~51 = CA FUEL 50 DEG(F) EXHAUST TEST~~ ~~52 = RED FUEL 50 DEG(F) EXHAUST TEST~~ ~~54 = ELECTRIC VEHICLE 2 DAY EVAP TEST~~ ~~55 = ELECTRIC VEHICLE 3 DAY EVAP TEST~~ 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 78 = Charge Depleting UDDS 80 = Charge Depleting US06 81 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 91 = SC03	Light-Duty	Certification Test Data	**Test Procedure Codes 80 (5-Cycle City Raw Test Bag Data) and 82 (5-Cycle Hwy Raw Test Bag Data) do not exist in Verify, but they did in CFEIS so they are reserved in the event that we someday migrate CFEIS data into Verify. However, *IF* we do have them in the TEST_PROC table then 80 would have the Test Category of 'FTP' and 82 would be 'HWY'. If they aren't in the TEST_PROC table, then there's no need to give them Test Categories.**	Manufacturer /LOD	Front end	XML	NEW: LD-CTD-TI-BR043 DELETE: ~~TI-BR13~~	NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012', then Test Procedure (TI-8) can not be equal to '62' (Electric Vehicle Urban Range Test) or '63' (Electric Vehicle Highway Range Test). DELETE: ~~TI-BR13: Test Procedure Codes (TI-8) of '80', '81', '83', or '83' are not allowed.~~
TI-9	**Test Fuel Type**	Enter the applicable test fuel type for this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	TestFuelTypeIdentifier	TRUE	1 per test	N(2)	Enumeration								1 = EPA UNLEADED GASOLINE 11 = INDUSTRIAL UNLEADED 100 OCTANE 4 = NUMBER 1 FUEL OIL 5 = CERT DIESEL, 350 PPM SULFUR 20 = NATURAL GAS 14 = CERT GASOL, 7-10 PPM SULFUR 12 = SPECIAL UNLEADED 91 RON 13 = CARB PHASE II GASOLINE 21 = CO(LO)-CO REGULAR (CERT) 22 = CO(LO)-CO PREMIUM (CERT) 23 = CO(LO)-CO REGULAR (TIER 2) 24 = CO(LO)-CO PREMIUM (TIER 2) 31 = METHANOL (CERT M31) 32 = METHANOL (CERT M56) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 35 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 40 = CNG 41 = LPG 42 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 43 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 44 = E15 (15% ETHANOL 90% CAL PHASE II GASOLINE) 50 = HYDROGEN 51 = TIER 2 CERT GASOLINE	Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
TI-10	**Test Start Odometer reading**	Enter the odometer reading at the beginning of the test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	OdometerStartValue	TRUE	1 per test	N(7,1)	Decimal				7	1	0.0	999,999.9		Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
TI-11	**Odometer units**	Enter the units of the odometer reading for this vehicle.	TestInformationSubmission/TestInformationDetails/TestDataDetails	CorrectionUnitsCode	TRUE	1 per test	A(1)	Enumeration								M - Miles K - Kilometers	Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
TI-13	**Exhaust - Evap test number link**	Required for evaporative tests. Enter the test number of the corresponding FTP exhaust test. The exhaust test must be entered prior to the evap test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	ExhaustEvaporativeTestLinkIdentifier	FALSE	1 per test	A(15)	String	~~12~~ 1	~~12~~ 15							Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR008a	TI-BR8: If Test Procedures (TI-8) is an evaporative test (Test Procedure equal to 23, 24, 27, 32, 34, 37, 38, 43, 44, 47) then the Exhaust/Evaporative Test Number Link (TI-13) is required and must reference an FTP Exhaust test number that already exists in Verify, otherwise it is not allowed.
TI-13.5	**Analytically-Derived FE / ~~CREE (ADFE)~~ Indicator**	Is this test analytically derived?	TestInformationSubmission/TestInformationDetails/TestDataDetails	AnalyticallyDerivedIndicator	TRUE	1 per test	A(1)	Enumeration								N=No Y=Yes	Light Duty	Certification Test Data		Manufacturer	Front end	XML		
NEW: TI-13.6	**Analytically-Derived FE / CREE Base Verify Test Number**	**If the test being submitted is an analytically-derived fuel economy/CREE test, enter the Verify Test Number upon which the analytically-derived test is based.**	**TestInformationSubmission/TestInformationDetails/TestDataDetails**	**AnalyticallyDerivedTestIdentifier**	**FALSE**	**1 per test**	**A(12)**	**Fixed String**	**12**	**12**							**Light-Duty**	**Certification Test Data**		**Manufacturer**	**Front end**	**XML**	**NEW: LD-CTD-TI-BR053 NEW: LD-CTD-TI-BR054 NEW: LD-CTD-TI-BR055**	**NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and if Analytically-Derived FE/CREE Indicator (TI-13.5) is equal to "Yes", then Analytically-Derived FE/CREE Base Verify Test Number (TI-13.6) is required, otherwise it is not allowed. NEW: Provided Analytically-Derived FE/CREE Base Test Number (TI-13.6) must exist in Verify and must belong to the submitter's Manufacturer Code or one of their approved Alternate Manufacturer Codes. NEW: The Test Number provided for Analytically-Derived FE/CREE Base Verify Test Number (TI-13.6) can not be an analytically-derived test (with Analytically-Derived FE/CREE Indicator (TI-13.5) equal to "Yes").**
NEW: TI-13.7	**Analytically-Derived FE / CREE - Total Road Load Horsepower**	**Enter the total road load horsepower at 50 mph (TRLHP50) for the analytically derived test vehicle configuration. (The analytical vehicle not actually tested)**	**TestInformationSubmission/TestInformationDetails/TestDataDetails**	**AnalyticallyDerivedRoadLoadHorsepowerMeasure**	**FALSE**	**1 per Test**	**N(3,1)**	**Decimal**				**3**	**1**	**0**	**99.9**		**Light Duty**	**Certificaton Test Data**		**Manufacturer**	**Front End**	**XML**	**NEW: LD-CTD-TI-BR056**	**If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and Analytically-Derived FE/CREE Indicator (TI-13.5) is equal to "Yes", then Analytically-Derived FE / CREE - Total Road Load Horsepower (TI-13.7) is required, otherwise it is not allowed.**

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue=Misc Certificaton Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collecti on Point	Collection Type	Applicable Business Rules	Validation Rules
NEW: TI-13.8	Analytically-Derived FE / CREE - ETW	Enter the equivalent test weight, in pounds for the analytically derived test vehicle. (The analytical vehicle not actually tested)	TestInformationSubmission/TestInformationDetails/TestDataDetails	AnalyticallyDerivedEquivalentTestWeightMeasure	FALSE	1 per Test	N(5)	Enumeration						0	14000	1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light-Duty	Certification Test Data	(Same enumeration list as ETW (VI-30) from VI dataset)	Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR057	If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and Analytically-Derived FE/CREE Indicator (TI-13.5) is equal to "Yes", then Analytically-Derived FE / CREE - ETW (TI-13.8) is required, otherwise it is not allowed.
NEW: TI-13.9	Analytically-Derived FE / CREE - N/V Ratio	Enter the applicable N/V ratio for the analytically derived test vehicle configuration. (The analytical vehicle not actually tested)	TestInformationSubmission/TestInformationDetails/TestDataDetails	AnalyticallyDerivedNVRatioMeasure	FALSE	1 per Test	N(4,1)	Decimal				4	1	0.0	999.9		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR058	If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and Analytically-Derived FE/CREE Indicator (TI-13.5) is equal to "Yes", then Analytically-Derived FE / CREE - N/V Ratio (TI-13.9) is required, otherwise it is not allowed.
TI-14	4WD Test Dyno	Was this test conducted on a 4WD dynamometer? Enter "Y" for yes, "N" for no.	TestInformationSubmission/TestInformationDetails/TestDataDetails	FourWheelDriveDynamometerIndicator	TRUE	1 per test	A(1)	Enumeration								Y = Yes N = No	Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
TI-15	EPA Dyno Number	This field is only filled in for tests conducted at EPA's test lab- not for mfr tests. This information will come from the LOD Test Report data.	TestInformationSubmission/TestInformationDetails/TestDataDetails	EPADynamometerNumberText	FALSE	1 per test	A(4)	String	1	4							Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
TI-16	Fuel Batch Manufacturer Code	Enter the manufacturer code for the owner of the fuel batch used for this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails/FuelBatchPropertiesDetails	FuelBatchManufacturerCode	FALSE	1 per test	A(3)	Fixed String	3	3	[A-Z0-9]{3}						Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR009 ~~TI-BR10~~	TI-BR9: Fuel Batch Manufacturer Code (TI-16), Fuel Batch ID (TI-17) and Fuel Calibration Number (TI-18), if present, must reference a Fuel Properties dataset that exists in the system. ~~TI-BR10: Not required for test fuel types equal to "Diesel?" or "hydrogen", or test procedures for evap or "electric range urban" or "electric range highway".~~
TI-17	Fuel batch ID	Enter the applicable fuel batch ID for this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails/FuelBatchPropertiesDetails	FuelBatchIdentifier	FALSE	1 per test	A(6)	String	1	6							Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR009 ~~TI-BR10~~	TI-BR9: Fuel Batch Manufacturer Code (TI-16), Fuel Batch ID (TI-17) and Fuel Calibration Number (TI-18), if present, must reference a Fuel Properties dataset that exists in the system. ~~TI-BR10: Not required for test fuel types equal to "Diesel?" or "hydrogen", or test procedures for evap or "electric range urban" or "electric range highway".~~
TI-18	Fuel calibration number	Enter the applicable fuel calibration number for this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails/FuelBatchPropertiesDetails	FuelCalibrationNumber	FALSE	1 per test	N(4)	Integer						1	9999		Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR009 ~~TI-BR10~~	TI-BR9: Fuel Batch Manufacturer Code (TI-16), Fuel Batch ID (TI-17) and Fuel Calibration Number (TI-18), if present, must reference a Fuel Properties dataset that exists in the system. ~~TI-BR10: Not required for test fuel types equal to "Diesel?" or "hydrogen", or test procedures for evap or "electric range urban" or "electric range highway".~~
TI-18.5	Diesel Adjustment Factor Usage Indicator	Enter the applicable diesel adjustment factor to be used for calculation of the certification level for this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	DieselAdjustmentFactorUsageIndicator	FALSE	1 per test	A(1)	Enumeration								U = Upward D = Downward				Manufacturer /LOD	Front end	XML	LD-CTD-TI-BR028	TI-BR28: If Test Fuel Type (TI-9) is equal to '9' (1994 Cert Diesel 300 ppm Sulfur) or '19' (2007 Cert Diesel 7-15 ppm Sulfur), the Diesel Adjustment Factor (TI-18.5) is required, otherwise it is optional.
New: TI-18.8	Manufacturer Confirmatory Test Indicator	Specify whether this test is a manufacturer confirmatory test required by CAP 2000 regulations.	TestInformationSubmission/TestInformationDetails/TestDataDetails	ManufacturerConfirmatoryTestIndicator	FALSE	1 per test	A(1)	Enumeration								Y = Yes N = No	Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR059	NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012', then Manufacturer Confirmatory Test Indicator (TI-18.8) is required for tests being submitted by manufacturers and is not allowed for tests being submitted by LOD.
New: TI-18.9	Original Manufacturer Verify Test Number That Was Confirmed	Enter the original Verify test number that was confirmed by this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	OriginalManufacturerConfirmedTestIdentifier	FALSE	1 per test	A(12)	Fixed String	12	12							Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR060 NEW: LD-CTD-TI-BR061 NEW: LD-CTD-TI-BR062	NEW: If Manufacturer Confirmatory Test Indicator (TI-18.8) is equal to "Yes", then Original Manufacturer Verify Test Number That Was Confirmed (TI-18.9) is required, otherwise it is not allowed. NEW: Test Date (TI-6) of the test being submitted must be equal to or later than the Test Date (TI-6) of the Original Manufacturer Verify Test Number That Was Confirmed (TI-18.9). NEW: Original Manufacturer Verify Test Number That Was Confirmed (TI-18.9) must exist on a Confirmatory Test Decision Information dataset for the same Vehicle ID (TI-4) and Vehicle Configuration Number (TI-5).
TI-22	Retest Indicator	"Yes" is entered any time this test is a retest of a previous test	TestInformationSubmission/TestInformationDetails/TestDataDetails	RetestIndicator	~~TRUE~~ FALSE	1 per test	A(1)	Enumeration								Y = Yes N = No	Light-Duty	Certification Test Data	If the schema is changed to make this a required field then the new business rule is not needed. However, if the schema is not changed then this new business rule is needed.	Manufacturer/LOD	Front end	XML	DELETE: ~~TI-BR11~~ NEW: LD-CTD-TI-BR063	~~DELETE: TI-BR11: If the submitters Manufacturer Code (TI-3) is equal to 'LOD' then Retest Indicator (TI-22) is required.~~ NEW: If Process Code (TI-0.5) is equal to "New Dataset" and if Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012', then Retest Indicator (TI-22) is required for all tests submitted by LOD and Manufacturers.
New: TI-22.1	Manufacturer Verify Test Number That Was Retested	Enter the Verify test number that required this retest.	TestInformationSubmission/TestInformationDetails/TestDataDetails	ManufacturerRetestTestNumberIdentifier	FALSE	1 per test	A(12)	Fixed String	12	12							Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR041 NEW: LD-CTD-TI-BR042	NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and if Retest Indicator (TI-22) is equal to "Yes", then Manufacturer Verify Test Number That Was Retested (TI-22.1) is required for Tests submitted by Manufacturers, otherwise it is not allowed. It is optional for tests submitted by LOD. NEW: Test Date (TI-6) of the test being submitted must be equal to or later than the Test Date (TI-6) of the Manufacturer Verify Test Number That Was Retested (TI-22.1).
TI-23	Retest Reason	Enter the reason for conducting this re-test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	RetestReasonIdentifier	FALSE	1 per test	N(2)	Enumeration								1 - Failed (F) 2 - Void (V) 3 - FE (FE) 4 - Unrepresentative (U) 99 - Other (OT)	Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML	~~DELETE: TI-BR13~~ NEW: LD-CTD-TI-BR044 NEW: LD-CTD-TI-BR045 ~~LD-CTD-TI-BR04~~	~~DELETE: TI-BR13: If the submitters Manufacturer Code (TI-3) is equal to 'LOD' and Retest Indicator (TI-22) equals 'Y' (Yes), then Retest Reason (TI-23) is required.~~ NEW: If Retest Indicator (TI-22) is equal to 'Y' (Yes), then Restest Reason (TI-23) is required. NEW: For tests submitted by manufacturers, Retest Reason (TI-23) can only be equal to '1', '2', or '3'.
TI-24	State of Charge Delta Indicator	Does the state of charge meet EPA's end of test criteria? This is required for Hybrid and Fuel Cell vehicles.	TestInformationSubmission/TestInformationDetails/TestDataDetails	ChargeStateDeltaIndicator	FALSE	1 per test	A(1)	Enumeration								Y = Yes N = No	Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML	NEW: LD-CTD-TI-BR046 NEW: LD-CTD-TI-BR067 DELETE: ~~TI-BR13~~	NEW: If Hybrid Indicator (VI-10.6) or Fuel Cell Indicator (VI-11.4) is equal to "Yes", then State of Charge Delta Indicator (TI-24) is required, otherwise it is optional. ~~DELETE: TI-BR13: If Fuel Category (VI-10) equals 'HV' (Hybrid) or 'FC' (Fuel Cell Electric), or 'HV' (Flex Fuel Hybrid) then State of Charge Delta Indicator (TI-24) is required.~~
TI-25	Test Comments	Enter any additional comments about this test.	TestInformationSubmission/TestInformationDetails/TestDataDetails	ManufacturerCommentText	FALSE	1 per test	A(1000)	String	1	1000							Light-Duty	Certification Test Data		Manufacturer /LOD	Front end	XML		
~~DELETE TI-26~~	~~All Electric Range - Urban~~	~~Enter the all electric urban range (in miles).~~	~~TestInformationSubmission/TestInformationDetails/UrbanRangeTestDetails~~	~~AllElectricRangeMeasure~~	~~FALSE~~		~~N(4,1)~~	~~Decimal~~				~~4~~	~~1~~	~~0.0~~	~~999.9~~		~~Light-Duty~~	~~Certification Test Data~~	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	~~Manufacturer /LOD~~	~~Front end~~	~~XML~~	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.
~~DELETE TI-27~~	~~Total DC Energy Output - Urban Test~~	~~Enter the total DC energy output for the urban test (in kWh/mi).~~	~~TestInformationSubmission/TestInformationDetails/UrbanRangeTestDetails~~	~~TotalDCOutputMeasure~~	~~FALSE~~		~~N(5,1)~~	~~Decimal~~				~~5~~	~~1~~	~~0.0~~	~~9999.9~~		~~Light-Duty~~	~~Certification Test Data~~	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	~~Manufacturer /LOD~~	~~Front end~~	~~XML~~	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.
~~DELETE TI-28~~	~~Total DC Energy Input - Urban Test~~	~~Enter the total DC energy input for the urban test (in kWh/mi).~~	~~TestInformationSubmission/TestInformationDetails/UrbanRangeTestDetails~~	~~TotalDCInputMeasure~~	~~FALSE~~		~~N(5,1)~~	~~Decimal~~				~~5~~	~~1~~	~~0.0~~	~~9999.9~~		~~Light-Duty~~	~~Certification Test Data~~	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	~~Manufacturer /LOD~~	~~Front end~~	~~XML~~	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue=Misc Certificaton Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collect ion Point	Collection Type	Applicable Business Rules	Validation Rules
DELETE TI-35	Net DC Expended - Urban Test	Enter the net DC expended for the urban test (in kWhrs).	TestInformationSubmission/TestInformationDetail/UrbanRangeTestData	NetDCExpendedMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.
DELETE TI-36	Total AC Energy - Charge Batteries After Urban Test	Enter the total AC energy charge of the batteries after the urban test (in kWhrs).	TestInformationSubmission/TestInformationDetail/UrbanRangeTestData	TotalACChargeAfterMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.
DELETE TI-37	Total DC Energy - Charge Batteries After Urban Test	Enter the total DC energy charge of the batteries after the urban test (in kWhrs).	TestInformationSubmission/TestInformationDetail/UrbanRangeTestData	TotalDCChargeAfterMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR14	TI-BR14: Required if Test Procedure (TI-8) equals "62" (ELECTRIC VEHICLE RANGE URBAN). Not allowed otherwise.
DELETE TI-33	All-Electric Range - Highway	Enter the all-electric urban range (in miles).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	AllElectricRangeMeasure	FALSE		N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
DELETE TI-33	Total DC Energy Output - Highway Test	Enter the total DC energy output for the highway test (in kWhrs).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	TotalDCOutputMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
DELETE TI-34	Total DC Energy Input - Highway Test	Enter the total DC energy input for the highway test (in kWhrs).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	TotalDCInputMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
DELETE TI-35	Net DC Expended - Highway Test	Enter the net DC expended for the highway test (in kWhrs).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	NetDCExpendedMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
DELETE TI-36	Total AC Energy - Charge Batteries After Highway Test	Enter the total AC energy charge of the batteries after the highway test (in kWhrs).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	TotalACChargeAfterMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
DELETE TI-37	Total DC Energy - Charge Batteries After Highway Test	Enter the total DC energy charge of the batteries after the highway test (in kWhrs).	TestInformationSubmission/TestInformationDetail/HighwayRangeTestData	TotalDCChargeAfterMeasure	FALSE		N(8,1)	Decimal				5	1	0.0	9999.9		Light Duty	Certification Test Data	With the new business rule for Test Procedure field (TI-8) that doesn't allow values of '62' or '63' to be selected, this field will not be able to be entered by mfrs so it does not need to actually be deleted from schema or database if it is easier. However, they should be deleted from frontend web screens if possible.	Manufacturer/OEM	Front end	XML	TI-BR15	TI-BR14: Required if Test Procedure (TI-8) equals "63" (ELECTRIC VEHICLE RANGE HIGHWAY). Not allowed otherwise.
PHEV Test Information Only (Test Procedure = Charge Depleting UDDS, Highway, US06)																								
NEW: TI-18.1	Number of UDDS/Highway/US06 Bags/Phases Conducted	Enter the number of UDDS/Highway/US06 bags/phases conducted for this test.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	TestBagPhaseCount	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(2)	Integer						1	99		LightDuty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
NEW: TI-18.2	UDDS/Highway/US06 Bag/Phase Number	Verify assigned number for each UDDS/Highway/US06 Bag/Phase for this test.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails/PHEVChargeDepletingBagPhaseDetails	TestBagPhaseNumber	FALSE	1 .. Number of UDDS/Highway/US06 Cycles Conducted	N(2)	Integer						1	99		LightDuty	Certification Test Data		Verify	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
NEW: TI-18.3	Recharge Event Voltage	Enter the actual measured input AC voltage to the charger for this test.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	RechargeEventVoltageMeasure	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(4,1)	Decimal				4	1	0	999.9		LightDuty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b NEW: LD-CTD-TI-BR065	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed. NEW: Recharge Event Voltage must be between "100" and "500" volts.

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue=Misc Certification Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collect ion Point	Collection Type	Applicable Business Rules	Validation Rules
NEW: TI-18.4	Recharge Event Energy (kiloWatt-hours)	Enter the actual measured energy (kiloWatt-hours) input to the charger to recharge the vehicle battery for this test.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	RechargeEventEnergyMeasure	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(7,4)	Decimal				7	4	0	999.9999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
NEW: TI-18.8.1	Charge Depleting Range (Calculated miles)	Enter the calculated charge depleting driving range (in miles) as required by 40 CFR XXX.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	CalculatedChargeDepletionRangeMeasure	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
NEW: TI-18.6	Charge Depleting Range (Actual miles)	Enter the actual measured charge depleting driving range (in miles) as required by 40 CFR XXX.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	ChargeDepletionRangeMeasure	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
NEW: TI-18.7	Equivalent All Electric Range (miles)	Enter the equivalent all electric range as required by California ARB's ZEV procedure.	TestInformationSubmission/TestInformationDetail/PHEVChargeDepletingTestInformationDetails	EquivalentElectricRangeMeasure	FALSE	1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)	N(6,3)	Decimal				6	3	0	999.999		Light-Duty	Certification Test Data		Manufacturer	Front end	XML	NEW: LD-CTD-TI-BR064a NEW: LD-CTD-TI-BR064b	NEW: Required if Test Procedure (TI-8) equals "Charge Depleting UDDS" (Test Procedure Code = "81"), "Charge Depleting US06" (Test Procedure Code = "83"), "Charge Depleting Highway" (Test Procedure Code = "84"), "Charge Depleting SC03" (Test Procedure Code = "85"), or "Charge Depleting 20 Degree F FTP" (Test Procedure Code = "86"), otherwise it is not allowed.
TI-19	Test Result/Emission Name	Enter all applicable test result names (and unrounded test results) for this test. Note the list of test result names includes possible fuel economy test results also. CREE and Opt-CREE are not allowable values at the test level; these will be calculated by Verify for EPA confirmatory tests and when tests are used in a Test Group.	TestInformationSubmission/TestInformationDetail/TestDataDetail/EmissionTestDetails	TestResultIdentifier	TRUE	1...Total # of Test Result Names in Enumeration List per UDDS Cycle Number (if Test Procedure equals Charge Depleting UDDS, Highway, US06) else 1...Total # of Test Result/Emissions Names in Enumeration List	A(16)	Enumeration								HC-TOTAL (Total Hydrocarbon) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT- CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) TWCOMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material hydrocarbon equivalent) OMNMHCE (Organic material non-methane hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) HECHO (Acetaldehyde) HC-NMHOX (SFTP Non-methane Hydrocarbon-Nitrogen Oxides for US06 or SC03) HC-NMHOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) ETHANOL (C2H6OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) MPI RE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4)-(Methane) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) SPITBACK (Spitback-Hydrocarbon in grams) Allowed for Charge Depleting Test Procedures Only AMP-HRS- Integrated Amp-hours START-SOC- System Start State of Charge Watt-hours END-SOC- System End State of Charge Watt-hours ACT-DISTANCE- Actual Distance Driven (miles) AS- VOLT - Average System Voltage	Light-Duty	Certification Test Data		Manufacturer &OD	Front end	XML	NEW: LD-CTD-TI-HB008 Update LD-CTD-TI-BR016a Add LD-CTD-TI-BR016b LD-CTD-TI-BR019 LD-CTD-TI-BR020 LD-CTD-TI-BR021a LD-CTD-TI-BR021b LD-CTD-TI-BR022a LD-CTD-TI-BR022b LD-CTD-TI-BR022c LD-CTD-TI-BR022d LD-CTD-TI-BR023a LD-CTD-TI-BR023b LD-CTD-TI-BR023c LD-CTD-TI-BR023d LD-CTD-TI-BR024a LD-CTD-TI-BR024b LD-CTD-TI-BR024c LD-CTD-TI-BR024d LD-CTD-TI-BR025a LD-CTD-TI-BR025b LD-CTD-TI-BR025c LD-CTD-TI-BR025d LD-CTD-TI-BR026a LD-CTD-TI-BR026b LD-CTD-TI-BR026c LD-CTD-TI-BR026d LD-CTD-TI-BR033 LD-CTD-TI-BR034	TI-BR16: The Test Result/Emission Name (TI-19) cannot contain 'CO-COMP' (CO SFTP Composite) or 'HC-NM+NOX-COMP' (NMHC+NOX SFTP Composite). TI-BR19: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'Y' (Yes) and the Test Category (TI-43) is equal to 'FTP' (Test Procedures (TI-8) = 2,11, 21, 25, 31, 35, 41, 45) then one of the Test Results submitted must have a Test Result/Emission Name (TI-19) equal to 'MFR-FE' (are the following emission names needed for analytically derived CREE?: 'CO', 'CO2', and 'HC-TOTAL'). TI-BR20: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'Y' (Yes) and the Test Category (TI-43) is equal to 'HWY' (Test Procedures (TI-8) = 3) then one of the Test Results submitted must have a Test Result/Emission Name (TI-19) equal to 'MFR FE'. (are the following emission names needed for analytically derived CREE?: 'CO', 'CO2', and 'HC-TOTAL'). TI-BR21: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is equal to '9' (1994 Cert Diesel 300 ppm Sulfur) or '19' (2007 Cert Diesel 7-15 ppm Sulfur), and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2, 3, 21, 25, 31, 35, 41, 45) then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-TOTAL' (Total Hydrocarbon), 'CO' (Carbon Monoxide), and 'CO2' (Carbon Dioxide).
TI-19	Test Result/Emission Name- Continued																					TI-19 BRs Continued...	TI-BR22: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is one of the ethanol fuel types (36, 37, 38, 43, 44, 45, 71), and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2, 3, 21, 25, 31, 35, 41, 45) then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-TOTAL' (Total Hydrocarbon), 'CO' (Carbon Monoxide), and 'CO2' (Carbon Dioxide), 'METHANOL', 'HCHO' (Formaldehyde), 'ETHANOL', and 'HCCHO' (Acetaldehyde); and the following fields must exist in the Fuel Properties submission associated with the Test Information: Fuel Specific Gravity (FP-13) and Fuel Blend Carbon Weight Fraction (FP-15). TI-BR23: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is '42' (LPG) and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2,3, 21, 25, 31, 35, 41, 45), then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-TOTAL', 'CO', and 'CO2'; and the following fields must exist in the Fuel Properties submission associated with the Test Information: Fuel Specific Gravity (FP-13) and Fuel Blend Carbon Weight Fraction (FP-15).
TI-19	Test Result/Emission Name- Continued																					TI-19 BRs Continued...	TI-BR24: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is '1' (Indolene 30) , '6' (EPA Unleaded), '7' (Industrial Unleaded 100 Octane), '8' (Number 1 Fuel Oil), '22' (Special Unleaded 91 RON), '24' (Cold CO Regular Cert), '25' (Cold CO Premium Cert), '26' (Cold CO Regular Tier 2), '27' (Cold CO Premium Tier 2), or '61' (Tier 2 Unleaded) and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2,3, 21, 25, 31, 35, 41, 45), then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-TOTAL', 'CO', and 'CO2'; and the following fields must exist in the Fuel Properties submission associated with the Test Information: Fuel Specific Gravity (FP-13) and Fuel Blend Carbon Weight Fraction (FP-15), and Fuel Net Heating Value (FP-14). TI-BR25- If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is '10' (Natural Gas) or '41' (CNG) and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2,3, 21, 25, 31, 35, 41, 45), then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-NM', 'METHANE', 'CO', and 'CO2'; and the following fields must exist in the Fuel Properties submission associated with the Test Information: Carbon Weight Fraction NMHC (FP-8), Carbon Weight Fraction HC (FP-9), Fuel Blend Carbon Weight Fraction (FP-15), Fuel Density (FP-12) and Weight Fraction CO2 (FP-16).
TI-19	Test Result/Emission Name- Continued																					TI-19 BRs Continued...	TI-BR26: If Analytically-Derived FE/CREE ~~(ADFE)~~ Indicator (TI-13.S) is equal to 'N' (No), Test Fuel Type (TI-9) is '23' (CARB Phase II Gasoline) and the Test Procedure (TI-8) requires Fuel Economy to be calculated (2,3, 21, 25, 31, 35, 41, 45), then Test Results must be submitted with the following Test Result/Emission Names (TI-19): 'HC-TOTAL', 'CO', and 'CO2'; and the following fields must exist in the Fuel Properties submission associated with the Test Information: Fuel Specific Gravity (FP-13) and Fuel Blend Carbon Weight Fraction (FP-15), and Fuel Net Heating Value (FP-14). TI-BR33: IF the Test Procedure (TI-8) is an ORVR (24 or 44) or Running Loss (32 or 37) test, then a Test Result/Emission Name (TI-19) of 'HC-TOTAL' is not allowed. TI-BR34: The Test Result/Emission Name (TI-19) of 'HC' is only allowed for ORVR (Test Procedure (TI-8) equal to 24 or 44) or Running Loss (Test Procedure (TI-8) equal to 32 or 37) tests. TI-BR35: Each Test Result/Emission Name (TI-19) must be a unique value. TI-BR37: If Test Procedure Code (TI-8) ie equal to '90' (US06) or '95' (SC03) then the submission must either contain a 'HC-NM+NOX' emission result (TI-19) or a HC-NM emission result (TI-19) and a 'NOX' emission result (TI-19).
TI-19	Test Result/Emission Name- Continued																					TI-19 BRs Continued...	New: If Test Category (TI-43) equals 'Charge Depleting' as determined by the Test Procedure (TI-8), then Test Result/Emission Names (TI-19) with Integrated Amp-hours, System Start State of Charge kiloWatt-hours, System End State of Charge kiloWatt-hours, Actual Distance Driven (miles) and Average System Voltage are required, otherwise they are not allowed. NEW: Test Result/Emission Name (TI-19) can not be equal to "CREE" and "Opt-CREE" at the test level. NEW: IF Test Result/Emission Name (TI-19) equal to "FE BAG 1" is submitted, then Test Result/Emission Name (TI-19) equal to "FE BAG 2" must also be submitted. NEW: IF Test Result/Emission Name (TI-19) equal to "FE BAG 2" is submitted, then Test Result/Emission Name (TI-19) equal to "FE BAG 1" must also be submitted. NEW: IF Test Result/Emission Name (TI-19) equal to "FE BAG 3" is submitted, then Test Result/Emission Name (TI-19) equal to "FE BAG 1", and "FE BAG 2" must also be submitted. NEW: IF Test Result/Emission Name (TI-19) equal to "FE BAG 4" is submitted, then Test Result/Emission Name (TI-19) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3" must also be submitted.

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue=Misc Certificaton Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collect ion Point	Collection Type	Applicable Business Rules	Validation Rules
TI-20	**Unrounded Test Result**	Enter the unrounded test result for each emission name for this test. Exhaust emission results and running losses must be in units of grams per mile. Evaporative emission results must be in units of grams per test. ORVR must be in units of grams per gallon of fuel dispensed.	TestInformationSubmission/TestInformationDetail/TestDataDetail/EmissionTestDetails	UnroundedResultValue	TRUE	1..Total # of Test Result Names in Enumeration List per UDDS Cycle Number of Test Procedure equals Charge Depleting UDDS, Highway, US06) else 1..Total # of Test Result/Emission Names in Enumeration List	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	Certification Test Data		Manufacturer/LOD	Front end	XML		
NEW TI-20.5	**Fuel Economy Value Unit**	Enter the applicable unit of measure for the entered fuel economy value(s). CNG vehicles should select fuel economy units of "MPG".	TestInformationSubmission/TestInformationDetail/TestDataDetails	FuelEconomyValueUnitIdentifier	FALSE	1 per Test	A(8)	Enumeration	3	8						MPG = miles per gallon ~~(default)~~ MPK = miles per kilogram KW-HR/100MILES = kilowatt-hour per mile	Light-Duty	Certification Test Data	FE Units might be changing with the new FE Label rule	M9	Front End	XML	NEW: LD-CTD-TI-BR038 NEW: LD-CTD-TI-BR039 NEW: LD-CTD-TI-BR040	NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and if any values selected for Test Result/Emission Name (TI-19) are equal to 'MFR FE' or 'FE BAG 1' or 'FE BAG 2' or 'FE BAG 3' or 'FE BAG 4', then Fuel Economy Value Unit (TI-20.5) is required, otherwise it is not allowed. NEW: If Test Fuel Type (TI-9) is equal to 'Hydrogen' (Test Fuel Type = '50') and Fuel Cell Indicator (VI-11.4) = 'Yes', then Fuel Economy Value Unit (TI-20.5) must be equal to 'MPK'. NEW: If Test Fuel Type (TI-9) is equal to 'Electricity' (Test Fuel Type = '52'), then Fuel Economy Value Unit (TI-20.5) must be equal to 'KW-HR/MI'.
NEW TI-20.6	**Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value**	Verify will calculate the mile per gallon equivalent for non-MPG fuel economy values	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails/EPAGeneratedEmissionTestDetails	FuelEconomyMPGEquivalentValue	FALSE	1 per Test Result/Emission Name	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	Certification Test Data		Verify	Back End	Assigned		NEW: If Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012' and if the Test Result/Emission Name (TI-19) is equal to 'MFR FE' or 'FE BAG 1' or 'FE BAG 2' or 'FE BAG 3' or 'FE BAG 4' and Fuel Economy Value Unit (TI-20.3) is not equal to 'MPG' then Verify-Calculated Fuel Economy mile Per Gallon Equivalent Value (TI-20.6) is required, otherwise the Verify-Calculated Fuel Economy Mile Per Gallon Equivalent Value (TI-20.6) equals the value submitted for Unrounded Test Result (TI-20) if the Test Result/Emission Name (TI-19) is equal to 'MFR FE' or 'FE BAG 1' or 'FE BAG 2' or 'FE BAG 3' or 'FE BAG 4'.
	EPA Confirmatory Test Exhaust Emission Cert Level Information																							
TI-38	**Rounded Emission Result**	Verify will round the unrounded test results for each EPA Confirmatory Test test number/emission name combination to the same number of digits plus one digit as the corresponding emission standard (that was entered in CT Supplemental Info). Each rounded result will then have the DF applied (that was entered in CT Supplemental Info) to calculate the official certification levels.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedExhaustDetails	RoundedEmissionResultValue	FALSE	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CT Supplemental Information.	N(11,7)	Decimal				11	7	0	9999.9999999		Light Duty	Certification Test Data	Must use ASTM rounding methodology. Don't round integrated Amp-hours, System Start State of Charge Watt-hours, System End State of Charge Watt-hours ~~CREE (and Opt-CREE) calculated values gets rounded to a whole number.~~	Verify	Back End	Assigned		
NEW TI-19.5	**Verify-Calculated CREE**	Verify-calculated carbon related exhaust emissions value (or optional carbon-related exhaust emissions value) with deterioration factors applied.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails	CarbonRelatedExhaustEmissionValue	FALSE	1 per Test	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	Certification Test Data	This data element is supported in the future Release. CREE or optional CREE will be calculated by Verify (with DFs applied for all the emission names in the CREE/Opt-CREE equations) using the indicator stored in Manufacturer Information that specifies whether manufacturers are using CREE or Optional CREE for the applicable model year. Different equations are used for CREE and Opt-CREE. This CREE calculation method needs to be added to M9 Info module and stored for each M9 Code/Model Year. It can either be entered by the M9 on the front-end or by EPA on the backend or database.	Verify	Back End	Assigned	NEW: For EPA confirmatory tests, if Process Code (TI-0.5) is equal to "New Dataset" and if Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012', and if Test Category (TI-43) is equal to 'FTP' (with Test Procedure (TI-8) not equal to '11' (Cold CO), '51' (CA FUEL 50 DEG(F) EXHAUST TEST), or '52' (FED FUEL 50 DEG(F) EXHAUST TEST)) or 'HWY', then Verify-Calculated CREE (or Opt-CREE) (TI-19.5) is required, otherwise it is not allowed.
NEW TI-19.6	**Verify-Calculated Opt-CREE**	Verify-calculated optional carbon-related exhaust emissions value with deterioration factors applied.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails	OptionalCarbonRelatedExhaustEmissionValue	FALSE	1 per Test	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	Certificaon Test Data	This data element is supported in the future Release. CREE or optional CREE will be calculated by Verify (with DFs applied for all the emission names in the CREE/Opt-CREE equations) using the indicator stored in Manufacturer Information that specifies whether manufacturers are using CREE or Optional CREE for the applicable model year. Different equations are used for CREE and Opt-CREE. This CREE calculation method needs to be added to M9 Info module and stored for each M9 Code/Model Year. It can either be entered by the M9 on the front-end or by EPA on the backend or database.	Verify	Back End	Assigned	NEW: For EPA confirmatory tests, if Process Code (TI-0.5) is equal to "New Dataset" and if Original Test Vehicle Model Year (VI-7) is equal to or greater than '2012', and if Test Category (TI-43) is equal to 'FTP' (with Test Procedure (TI-8) not equal to '11' (Cold CO), '51' (CA FUEL 50 DEG(F) EXHAUST TEST), or '52' (FED FUEL 50 DEG(F) EXHAUST TEST)) or 'HWY', then Verify-Calculated Opt-CREE (TI-19.5.1) is required, otherwise it is not allowed.
TI-39	**Certification Level**	Verify will calculate cert levels for EPA confirmatory tests by applying the DF submitted in the Supplemental Information dataset to each rounded emission result.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedExhaustDetails	CalculatedCertificationLevelValue	FALSE	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)		Light Duty	Certification Test Data	Verify BE Rule: NEW: If Test Category (TI-43) = 'CD' (Charge Depleting), then Certificatio Level (TI-39) is not to be calculated.	Verify	Back End	Assigned	NEW	
TI-40	**Certification Disposition Code**	For EPA confirmatory tests, Verify will compare the Calculated Cert Level with the corresponding standard entered in the CT Supplemental Information and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail".	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedExhaustDetails	CertificationDispositionCode	FALSE	1 for each calculated Cert Level	A(4)	Enumeration								Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light Duty	Certification Test Data	Verify BE Rule: NEW: If Test Procedure (TI-8) is equal to "Charge Depleting UDDS" (Test Procedure Code = '91'), "Charge Depleting Highway" (Test Procedure Code = '94'), or "Charge Depleting US06" (Test Procedure Code = '93'), then Certification Disposition Code (TI-40) is not allowed (i.e. not calculated). Verify BE Rule: NEW: If Test Result/Emission Name (TI-19) is equal to "CREE" or "Opt-CREE", then Certification Disposition Code (TI-40) are not allowed (i.e. not calculated). Verify will compare the Calculated Cert Level with the corresponding standard and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail".	Verify	Back End	Assigned	NEW NEW	
	Evap Emission Cert Level Information																							

Pink = TBD | Orange = Changes Due To New Technologies (Multi Fuels, PHEV) | Green = Label/CAFE/GHG Changes | Red = Misc Text Edits | Blue=Misc Certificaton Changes

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fraction al Digits	Min. Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Origin ator	Collect ion Point	Collection Type	Applicable Business Rules	Validation Rules
TI-41	**Rounded Emission Result**	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedEvaporativeDetails	RoundedEmissionResultValue	FALSE	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal				11	7	0	9999.9999999		Light Duty	Certification Test Data	Must use ASTM rounding methodology.	Verify	Back End	Assigned		
TI-42	**Cert Level**	Verify will calculate cert levels by applying the DF to each rounded emission result.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedEvaporativeDetails	CalculatedCertificationLevelValue	FALSE	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)		Light Duty	Certification Test Data		Verify	Back End	Assigned		
TI-21	**Certification disposition code**	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Certification Disposition Code to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". Verify calculated for EPA confirmatory tests only.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetail/EPAGeneratedEvaporativeDetails	CertificationDispositionCode	FALSE	1 for each calculated Cert Level	A(4)	Enumeration								Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light Duty	Certification Test Data	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". This is only calculated for LOD confirmatory tests- not for tests submitted by the mfr. The pass/fail calculation for mfr tests happens on the CSI in the Certification data requirements (delete this element from the schema since it is a Verify backend calculation)	Verify	Back end	Assigned		
	Test Procedure Reference Table- This will be used to make sure each CSI (test group/evap family combination) includes at least one test number for each required test category.																							
TI-43	**Test Category**	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails	TestCategoryIdentifier	TRUE	1 per test procedure	A(6)	Enumeration								FTP = Federal Test Procedure US06 = US06 SC03 = SC03 HWY = Highway NOx EVAP = Evaporative ~~COLD = Cold CO~~ SPIT = Spitback ORVR = On-board Refueling Vapor Recovery NCNHE = Non-City, Non-Highway Exhaust URBRNG = Urban Range HWYRNG = Highway Range **AC-IDLE = A/C Idle Test** **CD = Charge Depleting**	Light Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. EVAP = 23, 27, 34, 38, 43, 47 FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52 HWY = 3 HWYRNG = 63 NCNHE = 10, 72, 76 ORVR = 24, 32, 37, 44 SC03 = 95 SPIT = 15 URBRNG = 62 US06 = 90 **A/C Idle = 87, 88** **Charge Depleting = 81, 82, 83, 84, 85, 86**	Verify	Back End	Assigned		
TI-44	**Test Fuel Category**	This field will automatically be filled based on the Test Fuel Type (TI-0) in "Test" section) associated with the test number. A valid test number is required for these fuel categories.	TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails	TestFuelCategoryIdentifier	TRUE	1 per test fuel type	A(3)	Enumeration								~~EE~~-EL = Electricity CNG = Natural Gas D = Diesel E = Ethanol G = Gasoline H = Hydrogen LPG = LPG M = Methanol	Light Duty	Certification Test Data	~~EE~~-EL= 62 CNG = 10, 41 D = 9, 19 E = 36, 37, 38, 43, 44, 45, 71 G = 1, 6, 7, 8, 22, 23, 24, 25, 26, 27, 61 H = 50 LPG = 42 M = 31, 32, 33, 34	Verify	Backend	Assigned		
NEW: TI-45	**Test 5-Cycle Category**		**TestInformationSubmission/TestInformationDetail/EPAGeneratedTestInformationDetails**	**Test5CycleCategoryIdentifier**	**TRUE**	**1 per test procedure**	**A(5)**	**Enumeration**								**FTP75 = Federal Test Procedure (75 °F) FTP20 = Federal Test Procedure (20 °F) US06 = US06 SC03 = SC03 HWY = Highway Nox NOT5C = Not 5-Cycle Category**	**Light Duty**	**Certification Test Data**	**This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. FTP75 = 2, 21, 25, 31, 35, 41, 45 FTP20 = 11 HWY = 3 SC03 = 95 US06 = 90 All test procedures that don't get mapped to one of the 5 cycle categories would be set to "NOT5C".**	**Verify**	**Back End**	**Assigned**		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																					
Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fractional Digits	Min. Value	Max. Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Manufacturer Confirmatory Test Decision Information																	Light Duty								
	Vehicle Information		manufacturerConfirmatoryTestDescisionInfo																						
DI-0.5	Process Code	Select the desired process code for the current submission.	DecisionInformationSubmission/DecisionInformationDetails	InformationProcessCode	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Look-up Values: N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-1	Manufacturer code	The manufacturer code will be determined from the data submitter's CDX user login profile. The manufacturer code is an alpha-numeric code which identifies a unique vehicle manufacturer. This code is assigned by EPA during the manufacturer registration process.	DecisionInformationSubmission/DecisionInformationDetails	EPAManufacturerCode	TRUE	1 per Conf Test Decision Information	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Confirmatory Test		CDX From Users Info	Front End	XML	LD-CFT-DI-BR001 LD-CFT-DI-BR004 LD-CFT-DI-BR005 LD-CFT-DI-BR010a LD-CFT-DI-BR011 LD-CFT-DI-BR016 LD-CFT-DI-BR017 LD-CFT-DI-BR019	DI-BR1: Manufacturer Code (DI-1) must exist in the system. DI-BR4: The Manufacturer Code (DI-1) must match the manufacturer code embedded in the Test Group (DI-7). DI-BR5: The Manufacturer Code (DI-1) must match the manufacturer code embedded in the Evaporative/Refueling Family (DI-8). DI-BR10: If Process Code (DI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1), and Model Year (DI-5). DI-BR11: If the Process Code (DI-0.5) is equal to 'N' (New), the Manufacturer Code (DI-1), Vehicle ID (DI-3), and Vehicle Configuration Number (DI-4) must reference a vehicle currently active in the system. DI-BR16: If the Process Code (DI-0.5) is equal to 'R' (Report) ~~,~~ then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (DI-1) of the dataset for which the report was requested. DI-BR17: If the Process Code (DI-0.5) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (DI-1) of thesubmitted dataset. DI-BR19: If Process Code (DI-0.5) is equal to 'N' (New), then a record cannot already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1) and Model Year (DI-5), unless it is in the "Waived", "Completed" or "Deleted" states.
DI-2	Manufacturer Name	The manufacturer name will be looked up from the Manufacturer Info table in Verify using the manufacturer code from the data submitter's CDX user login profile. The manufacturer name is the name of the vehicle manufacturer that is associated with the manufacturer code.	N/A	N/A	FALSE	1 per Conf Test Decision Information	A(40)	String	1	40							Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-3	Vehicle ID	Enter the applicable test vehicle identification number for this set of confirmatory test decision information. The vehicle ID is a unique, manufacturer-defined, alpha-numeric identification number that is assigned to each manufacturer test vehicle. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting its confirmatory test decision information.	DecisionInformationSubmission/DecisionInformationDetails	VehicleIdentificationText	TRUE	1 per Conf Test Decision Information	A(20)	String	1	20							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR010a LD-CFT-DI-BR011 LD-CFT-DI-BR019	DI-BR10: If Process Code (DI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1), and Model Year (DI-5). DI-BR11: If the Process Code (DI-0.5) is equal to 'N' (New), the Manufacturer Code (DI-1), Vehicle ID (DI-3), and Vehicle Configuration Number (DI-4) must reference a vehicle currently active in the system. DI-BR19: If Process Code (DI-0.5) is equal to 'N' (New), then a record cannot already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1) and Model Year (DI-5), unless it is in the "Waived", "Completed" or "Deleted" states.
DI-4	Vehicle Configuration #	Enter the applicable test vehicle configuration number for this set of confirmatory test decision information. The vehicle configuration number is used to denote multiple configurations of a single test vehicle ID. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting confirmatory test decision information.	DecisionInformationSubmission/DecisionInformationDetails	VehicleConfigurationNumber	TRUE	1 per Conf Test Decision Information	N(2)	Integer	1	2				0	99		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR010a LD-CFT-DI-BR011 LD-CFT-DI-BR019	DI-BR10: If Process Code (DI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1), and Model Year (DI-5). DI-BR11: If the Process Code (DI-0.5) is equal to 'N' (New), the Manufacturer Code (DI-1), Vehicle ID (DI-3), and Vehicle Configuration Number (DI-4) must reference a vehicle currently active in the system. DI-BR19: If Process Code (DI-0.5) is equal to 'N' (New), then a record cannot already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1) and Model Year (DI-5), unless it is in the "Waived", "Completed" or "Deleted" states.
DI-5	Model Year	Enter the base model year for which the vehicle is being tested.	DecisionInformationSubmission/DecisionInformationDetails	ModelYear	TRUE	1 per Conf Test Decision Information	D(4)	Date	4	4	yyyy			1970	2050		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR002 LD-CFT-DI-BR003 LD-CFT-DI-BR010a LD-CFT-DI-BR019	DI-BR2: The Model Year (DI-5) must match the model year embedded in the Test Group (DI-7). DI-BR3: The Model Year (DI-5) must match the model year embedded in the Evaporative/Refueling Family (DI-8) DI-BR10: If Process Code (DI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1), and Model Year (DI-5). DI-BR19: If Process Code (DI-0.5) is equal to 'N' (New), then a record cannot already exist in the system with the same Vehicle ID (DI-3), Vehicle Configuration (DI-4), ~~and~~ Manufacturer Code (DI-1) and Model Year (DI-5), unless it is in the "Waived", "Completed" or "Deleted" states.
NEW DI-5.5	Represented test vehicle make	The represented test vehicle make (aka division name) for this test vehicle configuration.	~~TestVehicleInformationSubmission/TestVehicleInformation-Details/VehicleConfigurationDetails/VehicleDescriptionDetails~~	ActualTestVehicleMakeText	TRUE	1 per Conf Test Decision Information	A(20)	String	1	20							Light-Duty	Confirmatory Test	VI-8 This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Verify	Back End	Pre-Existing Data	n/a	n/a
NEW DI-5.6	Represented test vehicle model	The represented test vehicle model (aka carline name) for this test vehicle configuration.	~~TestVehicleInformationSubmission/TestVehicleInformation-Details/VehicleConfigurationDetails/VehicleDescriptionDetails~~	ActualTestVehicleModelText	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light-Duty	Confirmatory Test	VI-9 This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Verify	Back End	Pre-Existing Data	n/a	n/a
DI-6	Actual Vehicle Model Name (Carline)	Enter the actual carline/model name represented by this test vehicle.	DecisionInformationSubmission/DecisionInformationDetails	VehicleModelText	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test	This change must be made on Verify front end and back end web screens but no changes are needed to the XML Schema	Manufacturer	Front End	XML		
DI-7	Test Group	Enter the test group for which this set of confirmatory test decision information will be used to demonstrate compliance with the applicable exhaust emission standards.	DecisionInformationSubmission/DecisionInformationDetails	TestGroupName	TRUE	1 per Conf Test Decision Information	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}[0,][A-Z0-9]{1-6}?						Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR002 LD-CFT-DI-BR004 LD-CFT-DI-BR006 ~~DI-BR7~~	DI-BR2: The Model Year (DI-5) must match the model year embedded in the Test Group (DI-7). DI-BR4: The Manufacturer Code (DI-1) must match the manufacturer code embedded in the Test Group (DI-7). DI-BR6: The displacement embedded in the Test Group (DI-7) must be a valid number. ~~DI-BR7: For model years 2010 and later, the industry code embedded in the fifth character of the Test Group (DI-7) must reference a valid industry code.~~
DI-8	Evaporative/Refueling Family	Enter the evaporative/refueling family for which this set of confirmatory test decision information will be used to demonstrate compliance with the applicable evaporative/refueling standards.	DecisionInformationSubmission/DecisionInformationDetails	EvaporativeRefuelingFamilyName	FALSE	1 per Conf Test Decision Information	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}						Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR003 LD-CFT-DI-BR005 LD-CFT-DI-BR008 ~~DI-BR9~~	DI-BR3: The Model Year (DI-5) must match the model year embedded in the Evaporative/Refueling Family (DI-8) DI-BR5: The Manufacturer Code (DI-1) must match the manufacturer code embedded in the Evaporative/Refueling Family (DI-8). DI-BR8: The canister working capacity embedded in the Evaporative/Refueling Family (DI-8) must be a valid number. ~~DI-BR9: The Evaporative Family type embedded in the Evaporative/Refueling Family (DI-8) must be valid.~~

Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Manufacturer Confirmatory Test Decision Information																	**Light Duty**							
DI-9	**Federal Exhaust Emission Standard Level**	Select the applicable value representing EPA's exhaust emission standard level.	DecisionInformationSubmissionDecisionInformationDetails	FederalExhaustEmissionStandardIdentifier	FALSE	1 per Conf Test Decision Information	A(4)	Enumeration								Look-up Values B1 = Bin 1 B2 = Bin 2 B3 = Bin 3 B4 = Bin 4 B5 = Bin 5 B6 = Bin 6 B7 = Bin 7 B8 = Bin 8 B9 = Bin 9 B10 = Bin 10 B11 = Bin 11 HDV1 = Fed Heavy Duty Chassis Cert Std (8,500 - 10,000 GVW) HDV2 = Fed Heavy Duty Chassis Cert Std (10,000 - 14,000 GVW) OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR012	DI-BR12: At least one Federal Exhaust Emission Standard Level (DI-9) or California Exhaust Emission Standard Level (DI-10) must be selected.
DI-10	**California Exhaust Emission Standard Level**	Select the applicable value representing California's exhaust emission standard level.	DecisionInformationSubmissionDecisionInformationDetails	CAExhaustEmissionStandardIdentifier	FALSE	1 per Conf Test Decision Information	A(4)	Enumeration								Look-Up Values LEV = LEV-II LEV L2OP = LEV-II OPT 1 U2 = LEV-II ULEV S2 = LEV-II SULEV ZEV = CARB ZEV OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR012	DI-BR12: At least one Federal Exhaust Emission Standard Level (DI-9) or California Exhaust Emission Standard Level (DI-10) must be selected.
DI-11	**Federal Evaporative Emission Standard Level**	Select the applicable value representing EPA's evaporative emission standard level.	DecisionInformationSubmissionDecisionInformationDetails	FederalEvaporativeEmissionStandardsIdentifier	FALSE	1 per Conf Test Decision Information	A(5)	Enumeration								Look-Up Values T1 = TIER 1 EVAP T2 = TIER 2 EVAP HD-2D = Heavy-Duty 2-Day Evap (1.75 grams) HD-3D = Heavy-Duty 3-Day Evap (1.4 grams) OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-12	**California Evaporative Emission Standard Level**	Select the applicable value representing California's evaporative emission standard level.	DecisionInformationSubmissionDecisionInformationDetails	CAEvaporativeEmissionStandardsIdentifier	FALSE	1 per Conf Test Decision Information	A(2)	Enumeration								Look-Up Values C2 = LEV-II Evap Z2 = LEV-II Zero Evap OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-13	**Preview meeting test decision**	Did EPA request a confirmatory test for this vehicle during the preview meeting? Answer 'Y' if yes, otherwise 'N'.	DecisionInformationSubmissionDecisionInformationDetails	PreviewTestDecisionIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-14	**New engine/new technology**	Does this test vehicle use a new engine or new technology? Answer 'Y' if yes, 'YT' if yes, but the new engine/technology has already been tested by EPA, otherwise 'N'.	DecisionInformationSubmissionDecisionInformationDetails	NewTechnologyIndicator	TRUE	1 per Conf Test Decision Information	A(2)	Enumeration								Look-Up Values Y = Yes YT = Yes, but previously tested N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-15	**New engine/new technology description**	Enter a description of the new engine or new technology.	DecisionInformationSubmissionDecisionInformationDetails	NewTechnologyDescriptionText	FALSE	1 per Conf Test Decision Information	A(100)	String	1	100							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR013	DI-BR13: If New Engine or Technology Indicator (DI-14) is equal to 'Y' (Yes) or 'YT' (Yes, but previously tested) then New Engine or Technology Description (DI-15) is required.
DI-16	**Replacement for failed vehicle**	Is this test vehicle a replacement for a vehicle which has previously failed an emission standard at EPA or the manufacturer's test facility? Answer 'Y' if yes or 'N' if no.	DecisionInformationSubmissionDecisionInformationDetails	FailedVehicleReplacementIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-25	**Potential gas guzzler?**	Does this test meet the criteria for a potential gas guzzler as defined in the CFR? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmissionDecisionInformationDetails	PotentialGasGuzzlerIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-25.1 (NEW)	**Vehicle Purpose**	Is this test vehicle configuration an Emission Data Vehicle or a Fuel Economy Data Vehicle?	DecisionInformationSubmissionDecisionInformationDetails	VehiclePurposeIdentifier	TRUE	1 per Conf Test Decision Information	A(4)	Enumeration								1 = Emission Data Vehicle (EDV) 31 = Fuel Economy Data Vehicle (FEDV)		Confirmatory Test		Manufacturer	Front End	XML		
DI-25.2 (NEW)	**Running Change?**	Does this set of Confirmatory Test Decision Information support a running change?	DecisionInformationSubmissionDecisionInformationDetails	RunningChangeIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values Y = Yes N = No		Confirmatory Test		Manufacturer	Front End	XML		
DI-25.3 (NEW)	**Running Change Number**	If this set of Confirmatory Test Decision Information supports a running change, enter the running change number.	DecisionInformationSubmissionDecisionInformationDetails	RunningChangeNumberText	FALSE	1 per Conf Test Decision Information	A(25)	String										Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR014	DI-BR14: If Running Change (DI-25.2) is equal to 'Y' (Yes) then Running Change Number (DI-25.3) and Running Change Date (DI-25.4) are required.
DI-25.4 (NEW)	**Running Change Date**	If this set of Confirmatory Test Decision Information supports a running change, enter the date of the running change letter.	DecisionInformationSubmissionDecisionInformationDetails	RunningChangeDate	FALSE	1 per Conf Test Decision Information	D(8)	Date			[1-2][1][0-9][0][0-1][1][0-9][1][0-3][1][0-9][1]							Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR014	DI-BR14: If Running Change (DI-25.2) is equal to 'Y' (Yes) then Running Change Number (DI-25.3) and Running Change Date (DI-25.4) are required.
DI-17	**Earliest Vehicle EPA arrival date**	Enter the earliest date the test vehicle could be delivered to EPA for confirmatory testing. EPA's Laboratory Operations Division will use this information when assigning a test date if this test vehicle is selected for EPA confirmatory testing.	DecisionInformationSubmissionDecisionInformationDetails	EarliestArrivalDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8	[1-2][1][0-9][0][0-1][1][0-9][1][0-3][1][0-9][1]						Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
	Test Procedure Information		**manufacturerConfirmatoryTestDescisionInfo**			**1..n**																		
DI-17.5	**Test Number**	Enter all applicable test numbers for this test group/evaporative family combination. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 -12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an EPA test, any other number is a manufacturer test. A sample test number is "9MFR-9012345".	DecisionInformationSubmissionDecisionInformationDetails/TestProcedureInformationDetails	TestNumberIdentifier	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(12)	Fixed String	12	12								Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR015 NEW: LD-CFT-DI-BR020 NEW: LD-CFT-DI-BR021	DI-BR15: Test Number (DI-17.5) must exist in the system. NEW: If Model Year (DI-5) is equal to or greater than "2012", then the provided Test Number (DI-17.5) can not have a Test Procedure (TI-8) equal to 'EZ' (Electric Vehicle Urban Range Test) or 'EX' (Electric Vehicle Highway Range Test). NEW: If Test Number (DI-17.5) is valid, then the Manufacturer Code (TI-3), Vehicle ID (TI-4), and Vehicle Configuration Number (TI-5) combination for the test must be the same as the Decision Information combination (Manufacturer Code (DI-1), Vehicle ID (DI-3) and Vehicle Configuration Number (DI-4)) for which it was entered.
DI-18	**Manufacturer test procedures used**	Enter all applicable test procedures that were conducted on this test vehicle by the manufacturer.		TestProcedureIdentifier	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	N(2)	Enumeration								C = CVS 75 AND LATER (MID CAN. LOAD) H = HWFE (HIGHWAY TEST) SO = SS/LB CO CO = CO/LO CO SN = SPITBACK TEST 01 = FED FUEL 2 DAY EXH (BUTANE LOAD) 03 = FED FUEL 3 DAY EVAP (BUTANE) 04 = FED FUEL REFUEL (DRVR) (BUTANE) 05 = CA FUEL 2 DAY EXH (BUTANE LOAD) 07 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 08 = FED FUEL 3 DAY EXH (BUTANE LOAD) 10 = FED FUEL RUNNING LOSS 09 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 06 = CA FUEL 3 DAY EXH (BUTANE LOAD) 57 = CA FUEL RUNNING LOSS 56 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 01 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 03 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 04 = FED REFUEL (DRVR) (HEAT TO LOAD) 05 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 07 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 01 = CA FUEL 55 DIESEL EXHAUST TEST 02 = FED FUEL 50 DIESEL EXHAUST TEST 03 = FED FUEL 2 DAY EVAPORATIVE TEST 04 = CA FUEL 2 DAY EVAPORATIVE TEST 71 = CST T3/O SPEED IDLE TEST 76 = CST PRECO 2 SPD IDLE (EPA ONLY) 01 = Charge Depleting US06 02 = Charge Depleting US06 03 = Charge Depleting Highway 04 = Charge Depleting SC03 05 = Charge Depleting 20 Degree F FTP 07 = A/C Idle Test- Manual A/C 08 = A/C Idle Test- Automatic A/C 09 = US06 10 = SC03	Light Duty	Confirmatory Test	This should be the same list as TI-8 in Test Information	Verify	Back End	Pre-existing Data XML		

Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collected at Point	Collection Type	Applicable Business Rules	Validation Rules
Manufacturer Confirmatory Test Decision Information																	**Light Duty**							
DI-19	**Test Fuel type code**	Enter the numeric fuel type code that specifies the fuel type used in manufacturer testing for this test procedure.		TestFuelTypeCode	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	N(2)	Enumeration								0 = EPA UNLEADED GASOLINE 10 = CERT DIESEL 300 PPM SULFUR 19 = CERT DIESEL 7-15 PPM SULFUR 20 = CARB PHASE II GASOLINE 30 = COLD CO REGULAR (CERT) 35 = COLD CO PREMIUM (CERT) 36 = COLD CO REGULAR (TIER 2) 37 = COLD CO PREMIUM (TIER 2) 50 = METHANOL (CERT M50) 51 = METHANOL (CERT M50) 52 = METHANOL (CERT M85) 53 = METHANOL (CERT M100) 56 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 57 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 58 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 60 = CNG 62 = LPG 63 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 64 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 65 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 90 = HYDROGEN 91 = TIER 2 CERT GASOLINE 92 = ELECTRICITY 75 = E100 (100% ETHANOL)	Light Duty	Confirmatory Test		Verify	Back End	Pre-existing Data ~~XML~~		
DI-20	**Test Fuel type description**	This is a system generated field based on the value entered for the "Test Fuel Type Code".	n/a	n/a	FALSE	1 per Test Fuel Type Code per Test Procedure/Test Fuel Type Combination per Conf Test Decision Information	A(40)	String	1	40							Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-21	**Mfr. confirmatory test required for mfr. test procedure?**	Does this set of confirmatory test decision information meet the criteria in the CFR that defines when a manufacturer confirmatory test is required? Answer 'Y' for "yes" or 'N' for "no". This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/TestProcedureInformationDetails	ManufacturerTestRequiredIndicator	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration	1	1						Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test	**Need a view that lists the Vehicle IDs/Configurations that Manufacturer answered Yes for this question and that the manufacturer still hasn't submitted their confirmatory test results to Verify. Verify will check to see if any subsequent tests have been submitted for the same Vehicle ID/Configuration.**	Manufacturer	Front End	XML		
DI-22	**Failed an emission test?**	Did this test vehicle previously fail an emission test as defined in the CFR? Answer 'Y' if yes or 'N' if no. This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/TestProcedureInformationDetails	TestFailedIndicator	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-23	**Emissions > 90% of standard?**	Are any of the emission results for this test within 90% of the applicable emission standards as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/TestProcedureInformationDetails	Within90PercentOfStandardIndicator	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-24	**Higher than expected fuel economy?**	Does this test have higher than expected fuel economy as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/TestProcedureInformationDetails	HigherThanExpectedFuelEconomyIndicator	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No N/A = Not Applicable	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
DI-26	**Fuel economy > Class leader?**	Does this test meet the criteria for fuel economy class leader as defined in the CFR for manufacturer conducted testing? Answer 'Y' if yes or 'N' if no. This question must be answered for each fuel economy test procedure conducted by the manufacturer.	DecisionInformationSubmission/DecisionInformationDetails/TestProcedureInformationDetails	FuelEconomyGreaterThanLeaderIndicator	TRUE	1 per test procedure/test fuel type combination per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No N/A = Not Applicable	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
	Manufacturer Submission Information		**manufacturerConfirmatoryTestDecisionInfo**																					
~~DI-27~~																								
DI-28	**Manufacturer comments**	Enter any comments to describe the changes being made if this is an update to a previously submitted set of confirmatory test decision information for which EPA has already made its confirmatory testing decision.	DecisionInformationSubmission/DecisionInformationDetails	SubmissionCommentText	FALSE	1 per Conf Test Decision Information	A(500)	String	1	500							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-DI-BR018	DI-BR18: If the value of 'OT' (Other) is chosen for any of the four standards fields (DI-9 (Federal Exhaust Emission Standard Level), DI-10 (California Exhaust Emission Standard Level), DI-11 (Federal Evaporative Emission Standard Level), or DI-12 (California Evaporative Emission Standard Level)), then the Manufacturer Comments field (DI-28) is required.
DI-29	**Date submitted**	A system-generated field indicating the date that this set of confirmatory test decision information is submitted to EPA.			TRUE	1 per Conf Test Decision Information	D(8)	Date									Light Duty	Confirmatory Test		Verify	Front End	XML		
DI-30	**Manufacturer Confirmatory Test Contact Name**	The name of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's email address and phone number will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactRepresentativeName	TRUE	1 per Conf Test Decision Information	A(50)	String		50							Light Duty	Confirmatory Test		Verify/Manufacturer	Back End	Pre-Existing Data		
DI-31	**Mfr Confirmatory Test Contact email address**	E-mail address of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's email address will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactEmailText	TRUE	1 per Conf Test Decision Information	A(100)	String		100							Light Duty	Confirmatory Test		Verify/Manufacturer	Back End	Pre-Existing Data		

Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Manufacturer Confirmatory Test Decision Information																	**Light Duty**							
DI-32	**Manufacturer Confirmatory Test Contact Phone Number**	Phone number of the manufacturer representative that should be contacted if EPA has questions regarding this set of confirmatory test decision information. The contact's phone number will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of Verify.	N/A	ContactPhoneNumberText	TRUE	1 per Conf Test Decision Information	A(25)	String		25							Light Duty	Confirmatory Test		Verify/Manufacturer	Back End	Pre-Existing Data		
	CISD Test Decision Information																Light Duty	Confirmatory Test						
DI-33	**Random test selection rate**	Internal EPA field only. Adjustable % rate used for random test selection algorithm. Determined by EPA.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	RandomTestSelectionRate	TRUE	1 per Conf Test Decision Information	N(2)	Integer						0	99		Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-34	**Random test selection indicator**	Internal EPA field only. Indicates if confirmatory test was a random selection. Y/N; default == null.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	RandomTestSelectionIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-35	**EPA Testing decision indicator**	Internal EPA field only. Indicates if confirmatory test will be conducted at EPA. Y/N; default == null.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	EPATestDecisionIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-36	**Reason for confirmatory EPA testing code**	Internal EPA field only. Multiple predefined codes used to lookup reason for conf. EPA test' descriptions.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	EPAConfirmatoryTestReasonCode	TRUE	1 per Conf Test Decision Information	N(2)	Enumeration	2	2						"01" = "Random" "06" = "New Engine/Technology" "99" = "Other"	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-37	**Reason for confirmatory EPA testing code description**	Internal EPA field only. Possible values: '01' = random audit '06' = new engine&technology '99' = other reason		CISDTestDecisionInformation	TRUE	1 per Conf Test Decision Information	A(40)	Enumeration	2	2						"01" = "Random" "06" = "New Engine/Technology" "99" = "Other"	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-38	**Test procedure codes selected for EPA Confirmatory Testing**	Internal EPA field only. EPA defined codes which correspond to a set of unique test procedures used for confirmatory testing at EPA. Multiple predefined codes used to lookup test procedure descriptions.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/EPATestDetails	EPATestProcedureCode	TRUE	1..n per Conf Test Decision Information	N(2)	Enumeration								01 = CVS 75 AND LATER (W/O CAL LOAD) 11 = HWFE (HIGHWAY TEST) 20 = IDLE CO 13 = CO/LO CO 15 = SPITBACK TEST 24 = FED FUEL 2 DAY EVH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 34 = FED FUEL REFUEL (DRVR) (BUTANE) 25 = CA FUEL 2 DAY EVH (BUTANE LOAD) 57 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EVH (BUTANE LOAD) 58 - FED FUEL RUNNING LOSS 35 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 56 = CA FUEL 3 DAY EVH (BUTANE LOAD) 37 - CA FUEL RUNNING LOSS 59 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EVH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (DRVR) (HEAT TO LOAD) 46 = CA FUEL 2 DAY EVH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 54 = CA FUEL 50 DIESEL EXHAUST TEST 67 = FED FUEL 50 DIESEL EXHAUST TEST ~~70 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~71 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ 72 = CST TWO SPEED IDLE TEST 73 = CST PRECI 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 82 = Charge Depleting US06 83 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = AC idle Test- Manual AC 88 = AC Idle Test- Automatic A/C 90 = US06 98 = SC03	Light Duty	Confirmatory Test	!!!NEED TO USE FULL LIST OF TEST PROCEDURES-NOT THE CURRENT ABBREVIATED LIST!!! ~~03 = CVS 75 and later (w/o cal. load)~~ ~~04 = HWFE~~ ~~24 = Federal fuel 2 day exhaust (w/gas load)~~ ~~33 = 3 day Evap~~ ~~56 = California fuel 2 day exhaust (w/gas load)~~ ~~57 = California fuel 3 day evap~~ ~~62 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ ~~99=OTH~~	EPA	Back End	Data Entry		
DI-38.5	**Test Fuel Type Code For EPA Confirmatory Testing**	Internal EPA field only. The test fuel that will be used for each of the test procedures selected by EPA for EPA confirmatory testing.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/EPATestDetails	EPATestFuelTypeCode	TRUE	1..n per Conf Test Decision Information	N(2)	Enumeration								0 = EPA UNLEADED GASOLINE 9 = CERT DIESEL 300 PPM SULFUR 18 = CERT DIESEL 7-15 PPM SULFUR 23 = CARB PHASE II GASOLINE 25 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 26 = E79 (75% ETHANOL 30% EPA UNLEADED GASOLINE) 27 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 28 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 40 = CNG 45 = LPG 49 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 50 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 65 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 69 = HYDROGEN 92 = TIER 2 CERT GASOLINE 93 = ELECTRICITY 71 = E100 (100% ETHANOL)	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-39	**Special testing instructions**	Internal EPA field only. CCD analyst defined.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	SpecialTestInstructionText	FALSE	1 per Conf Test Decision Information	A(1000)	String	1	1000							Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-40	**Number of preps**	Internal EPA field only. Number of LA-4 prep cycles for a test vehicle. Entered by cert analyst.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	PrepCyclesNumber	TRUE	1 per Conf Test Decision Information	N(2)	Integer	1	2							Light Duty	Confirmatory Test	Default value of "1" but EPA cert rep can change to a different value.	EPA	Back End	Pre-Existing Data or Data Entry		
DI-41	**Cert analyst name**	Internal EPA field only. CCD analyst who made test decision.			TRUE	1 per Conf Test Decision Information	A(30)	String	1	30							Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-42	**Cert analyst phone #**	Internal EPA field only. CCD analyst phone number.			TRUE	1 per Conf Test Decision Information	A(15)	String	15	15							Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-43	**Cert conf. test decision date and time**	Internal EPA field only. Date and time of CCD analyst's decision. Format: yyyy/mm/dd hh:nn (24hr)			TRUE	1 per Conf Test Decision Information	D(12)	Date	12	12						YYYY/MM/DD HH:NN (24 hr)	Light Duty	Confirmatory Test		Verify	Back End	Pre-Existing Data		
DI-44	**Cert comments**	Internal EPA field only. CCD analyst defined.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	CertificationCommentText	FALSE	1 per Conf Test Decision Information	A(1000)	String	1	1000							Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-45	**Manufacturer report suppression indicator**	Internal EPA field only. Possible Values: Y = A copy of the confirmatory test report is not sent electronically to the manufacturer. N = Report is automatically sent following the EPA confirmatory test.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails	ManufacturerReportSuppressionIndicator	FALSE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Possible Values: Y = A copy of the confirmatory test report is not sent electronically to the manufacturer. N = Report is automatically sent following the EPA confirmatory test.	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
	LOD Test Scheduling Information																Light Duty	Confirmatory Test						
DI-46	**LOD assigned test date**	Internal EPA field only. Test date assigned by LOD.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODTestScheduledDetails	AssignedTestDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		LOD	Back End	Data Entry		
DI-47	**LOD test date assigner**	Internal EPA field only. LOD representative who assigned test date.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODTestScheduledDetails	TestDateAssignerName	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-48	**LOD test date assigner 2**	Internal EPA field only. LOD representative who assigned test date if different than logged in user.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODTestScheduledDetails	TestDateAlternateAssignerName	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test		LOD	Back End	Data Entry		
DI-49	**LOD date of test date assignment**	Internal EPA field only. Date of test assignment.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODTestScheduledDetails	TestDateAssignmentDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-50	**LOD comments**	Internal EPA field only. LOD representative defined.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODTestScheduledDetails	LODCommentText	FALSE	1 per Conf Test Decision Information	A(200)	String	1	200							Light Duty	Confirmatory Test		LOD	Back End	Data Entry		
	Retest Information																Light Duty	Confirmatory Test						
DI-51	**Retest needed?**	Internal EPA field only. Y/N; default == null. Entered by Cert analyst. Y = Need to conduct a retest. N = No need to retest. Decision is made by CISD, LOD, and manufacturer, or a combination of the three.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Y = Need to conduct a retest. N = No need to retest	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		

Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Original or	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Manufacturer Confirmatory Test Decision Information																	**Light Duty**							
DI-52	**Retest decision comment**	Internal EPA field only. Comment entered by LOD or CISD representative.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestDecisionCommentText	FALSE	1 per Conf Test Decision Information	A(500)	String	1	500							Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-53	**Cert Analyst (retest)**	Internal EPA field only. Cert analyst deciding retest status.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestCertificationAnalystName	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-54	**Cert retest decision date**	Internal EPA field only. Date of Cert analyst's retest decision.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestCertificationDecisionDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-55	**LOD retest date**	Internal EPA field only. Date of retest assigned by LOD.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		LOD	Back End	Data Entry		
DI-56	**LOD retest date assigner**	Internal EPA field only. LOD representative who assigned retest date.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestDateAssignerName	TRUE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-57	**LOD retest date assigned**	Internal EPA field only. Date of retest date assignment.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestDateAssignmentDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-58	**Reason for retest code**	Internal EPA field only. Multiple predefined codes to lookup retest descriptions. 1=void; 2=emission failure; 3=high coast down; 4=FE diffrenit by > 3%	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	RetestReasonIdentifier	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						1=void; 2=emission failure; 3=high coast down; 4=FE diffrenit by > 3%	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
DI-59	**Testing complete indicator**	Internal EPA field only. EPA sets to 'Y' when vehicle is finished with testing	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/RetestInformationDetails	TestCompletionIndicator	TRUE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Y = Testing completed. N = Testing not completed	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
	LOD QC Check Information																**Light Duty**	**Confirmatory Test**						
DI-60	**QC check indicator**	Internal EPA field only. 'Y' or 'N' (default). Y = LOD quality control (QC) check of test has been performed. N = No check has been performed. LOD QC indicator is used for a "basic" check at the time the LOD test is finished, and a second time during a final LOD QC check of the confirmatory test results.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODQualityControlCheckDetails	BasicCheckIndicator	FALSE	1 per Conf Test Decision Information	A(1)	Enumeration	1	1						Y = LOD quality control (QC) check of test has been performed. N = No check has been performed.	Light Duty	Confirmatory Test		LOD	Back End	Data Entry		
DI-61	**QC check assigner**	Internal EPA field only. LOD representative who did the QC check.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODQualityControlCheckDetails	CheckAssignerName	FALSE	1 per Conf Test Decision Information	A(50)	String	1	50							Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-62	**QC check comments**	Internal EPA field only. LOD representative defined.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODQualityControlCheckDetails	CheckCommentText	FALSE	1 per Conf Test Decision Information	A(200)	String	1	200							Light Duty	Confirmatory Test		Verify	Back End	Assigned		
DI-63	**QC check entry date**	Internal EPA field only. Date the final LOD QC check was completed.	DecisionInformationSubmission/DecisionInformationDetails/EPAGeneratedDecisionInformationDetails/LODQualityControlCheckDetails	CheckEntryDate	TRUE	1 per Conf Test Decision Information	D(8)	Date	8	8						YYYYMMDD	Light Duty	Confirmatory Test		Verify	Back End	Assigned		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Shift Schedule Information																								
SS-0.5	**Process Code**	Select the desired process code for the current submission.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	InformationProcessCode	TRUE		A(1)	Enumeration	1	1						Look-up Values N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SS-BR009	If Process Code = "R" or "D" or "C" , a record must exist in Verify for the primary key of this module.
SS-1	**Shift schedule ID**	Identifier for the shift schedule to be performed for a test	ShiftScheduleSubmission/ShiftScheduleInformationDetails/	ShiftScheduleIdentifier	TRUE		A(4)	String	1	4	[A-Z0-9]{1,4}						Light Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)	Manufacturer	Front End	XML	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR006	SS-BR1: If Process Code (SS-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4). SS-BR6: If Process Code (SS-0.5) is equal to 'N' (New), then a Shift Schedule record cannot already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4).
SS-2	**Shift schedule database code**	Internal EPA code for the source of the shift schedule. Verify will automatically load this element with "A".		n/a	TRUE		A(1)	Enumeration								'A' = Manufacturers (for cert/fe	Light Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)	Verify	Back End	Assigned	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR006	SS-BR1: If Process Code (SS-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4). SS-BR6: If Process Code (SS-0.5) is equal to 'N' (New), then a Shift Schedule record cannot already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4).
SS-4	**Manufacturer code**	Manufacturer code will be assigned during login.	ShiftScheduleSubmission/ShiftScheduleInformationDetails/	EPAManufacturerCode	TRUE		A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Confirmatory Test	Primary key for shift schedules is: shift schedule ID (SS-1) + shift schedule database code (SS-2) + mfr code (SS-4)	CDX From Users Info	Front End	XML	LD-CFT-SS-BR001a LD-CFT-SS-BR001b LD-CFT-SS-BR002 LD-CFT-SS-BR004 LD-CFT-SS-BR005 LD-CFT-SS-BR006	SS-BR1: If Process Code (SS-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4). SS-BR2: Manufacturer Code (SS-4) must exist in the system. SS-BR4: If the Process Code (SS-0.5) is equal to 'R' (Report)then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (SS-4) of the dataset for which the report was requested. SS-BR5: If the Process Code (SS-0.5) is equal to 'N' (New) or 'C' (Correction) then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (SS-4) of the submitted dataset. SS-BR6: If Process Code (SS-0.5) is equal to 'N' (New), then a Shift Schedule record cannot already exist in the system with the same Shift Schedule ID (SS-1), Shift Schedule Database Code (SS-2), and Manufacturer Code (SS-4).
SS-5	**Shift schedule description**	The text description of the shift schedule.	ShiftScheduleSubmission/ShiftScheduleInformationDetails/	ShiftScheduleDecriptionText	FALSE		A(30)	String	1	30							Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-7	**LNS error severity code**	NOTE: (For EPA use only)		n/a	FALSE		N(1)	Integer						0	5	0 .. 5	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
SS-8	**Non-cruise declutch speed**	Speed for a declutch operation	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	DeclutchSpeedValue	TRUE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-9	**Non-cruise 1-2 gear SS**	1-2 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear1To2SpeedValue	TRUE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-10	**Non-cruise 2-3 gear SS**	2-3 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear2To3SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-11	**Non-cruise 3-4 gear SS**	3-4 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear3To4SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-12	**Non-cruise 4-5 gear SS**	4-5 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear4To5SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-13	**Non-cruise 5-6 gear SS**	5-6 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear5To6SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-14	**Non-cruise 6-7 gear SS**	6-7 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear6To7SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-15	**Non-cruise 7-8 gear SS**	7-8 acceleration shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/NonCruiseShiftDetails	Gear7To8SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-16	**Cruise declutch speed**	Cruise speed for a declutch operation	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	DeclutchSpeedValue	TRUE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-17	**Cruise 1-2 gear SS**	1-2 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear1To2SpeedValue	TRUE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-18	**Cruise 2-3 gear SS**	2-3 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear2To3SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-19	**Cruise 3-4 gear SS**	3-4 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear3To4SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-20	**Cruise 4-5 gear SS**	4-5 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear4To5SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-21	**Cruise 5-6 gear SS**	5-6 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear5To6SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-22	**Cruise 6-7 gear SS**	6-7 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear6To7SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-23	**Cruise 7-8 gear SS**	7-8 cruise shift point speed	ShiftScheduleSubmission/ShiftScheduleInformationDetails/CruiseShiftDetails	Gear7To8SpeedValue	FALSE		N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Shift Schedule Information																								
SS-56	**Drive schedule name code**	Code identifying a particlar drive cycle, e.g. the FTP drive cycle.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	DriveScheduleNameCode	TRUE		A(3)	Enumeration								'002' - FTP (Cert); '003' - HWFE (Cert); '004' - US06 (Cert); '005' - SC03 (Cert); '021' - LA4 (prep only); '022' - LA4; '023' - 505; '031' - HWFE (no warmup); '101' - SCC#1; '102' - SCC#2; '103' - BIH (Auto); '104' - BIH (Manual); '111' - 3BagHWFE; '112' - 3Bag505; '121' - LA4 (perturbed 1.5)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-57	**Model year**	NOTE: Initial entry only.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	ModelYear	FALSE		N(4)	Date				4		1970	2100	1970 .. 2100	Light Duty	Confirmatory Test	Required for a new shift schedule submission.	Manufacturer	Front End	XML		
SS-58	**Comments**	Enter additional information about the shift schedule.	ShiftScheduleSubmission/ShiftScheduleInformationDetails	ShiftScheduleCommentText	FALSE		A(200)	String	1	200							Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-59	**Shift point number**	System-assigned when initially creating a shift schedule. To modify a shift point, a shift time must exist for the shift schedule. To insert a new shift point, a new shift point is submitted but not the shift point number… the system will automatically adjust the shift point numbers to include the new shift point.	ShiftScheduleSubmission/ShiftScheduleInformationDetails/ShiftPointDetails	ShiftPointNumber	FALSE	1..n	N(3)	Integer				3		1	999		Light Duty	Confirmatory Test		Verify(Manufacturer when not new)	Front End	XML	LD-CFT-SS-BR007 LD-CFT-SS-BR008	SS-BR7: The Shift Time (SS-60) entered for a Shift Point (SS-59) must be greater than the Shift Time (SS-60) of the previous Shift Point (SS-59). SS-BR8: The Shift Point (SS-59) must be specified for all the entries or none of them.
SS-60	**Shift time**	Time in seconds from beginning of test drive cycle.	ShiftScheduleSubmission/ShiftScheduleInformationDetails/ShiftPointDetails	ShiftTimeMeasure	TRUE	1..shiftPoint Number	N(5,1)	Decimal				5	1	0	2500	0000.0 - 2500.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SS-BR007	SS-BR7: The Shift Time (SS-60) entered for a Shift Point (SS-59) must be greater than the Shift Time (SS-60) of the previous Shift Point (SS-59).
SS-61	**Shift speed**	in miles per hour (MPH) only	ShiftScheduleSubmission/ShiftScheduleInformationDetails/ShiftPointDetails	ShiftSpeedMeasure	FALSE	1..shiftPoint Number	N(4,1)	Decimal				4	1	0	200	000.0 - 200.0	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-62	**Shift action code**	Code describing a shift event such as a shift from 1-2	ShiftScheduleSubmission/ShiftScheduleInformationDetails/ShiftPointDetails	ShiftActionCode	TRUE	1..shiftPoint Number	A(2)	Enumeration								20 - declutch; 30 - declutch; 40 - declutch; 50 - declutch; 60 - declutch; 70 - declutch; 80 - declutch; 12 - upshift 1 to 2; 14 - upshift 1 to 4; 23 - upshift 2 to 3; 34 - upshift 3 to 4; 45 - upshift 4 to 5; 56 - upshift 5 to 6; 67 - upshift 6 to 7; 78 - upshift 7 to 8; 87 - downshift 8 to 7; 76 - downshift 7 to 6; 65 - downshift 6 to 5; 54 - downshift 5 to 4; 43 -downshift 4 to 3; 32 - downshift 3 to 2; 21 - downshift 2 to 1; 86 - down-skipshift 8 to 6; 85 - down-skipshift 8 to 5; 84 - down-skipshift 8 to 4; 83 - down-skipshift 8 to 3; 82 - down-skipshift 8 to 2; 81 - down-skipshift 8 to 1; 75 - down-skipshift 7 to 5; 74 - down-skipshift 7 to 4; 73 - down-skipshift 7 to 3; 72 - down-skipshift 7 to 2; 71 - down-skipshift 7 to 1; 64 - down-skipshift 6 to 4; 63 - down-skipshift 6 to 3; 62 - down-skipshift 6 to 2; 61 - down-skipshift 6 to 1; 53 - down-skipshift 5 to 3; 52 - down-skipshift 5 to 2; 51 - down-skipshift 5 to 1; 42 - down-skipshift 4 to 2; 41 - down-skipshift 4 to 1; 31 - down-skipshift 3 to 1; 97 - use shift indicator light; 98 - creeper gear;	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SS-63	**Alternative Shift Action Description**	Enter only if 'shift action code' = 99	ShiftScheduleSubmission/ShiftScheduleInformationDetails/ShiftPointDetails	ShiftPointScreenText	FALSE	1..shiftPoint Number	A(9)	String	0	9							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SS-BR003	SS-BR3: If Shift Action Code (SS-62) is equal to '99' (Alternative Shift Action), then Shift Point Screen (SS-63) is required.
SS-64	**Shift point H/V indicator**	for EPA use only.		n/a	FALSE		A(1)	Enumeration								'H' or 'V'	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
SS-65	**Shift point L/R indicator**	for EPA use only.		n/a	FALSE		A(1)	Enumeration								'L' or 'R'	Light Duty	Confirmatory Test		EPA	Back End	Data Entry		
SS-66	**Exception point code**	asterisk, 'N' or blank -- include this shift point speed in the VDA shift pattern calculations; 'Y' or 'X' -- do not include this shift point speed in the VDA shift pattern calculations		ExceptionPointCode	FALSE	1..shiftPoint Number	A(1)	Enumeration								'*' (asterisk), 'N', blank, 'Y', 'X'	Light Duty	Confirmatory Test		EPA	Back End	XML		
SS-67	**Cruise point**	For EPA use only		n/a	FALSE		A(1)	String	1	1							Light Duty	Confirmatory Test		EPA	Back End	Data Entry		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-0.5	**Process Code**	Select the desired process code for the current submission.	SupplementalInformationSubmission/SupplementalInformationDetails	InformationProcessCode	TRUE	1 per CT Supplemental Information	A(1)	Enumeration	1	1						Look-up Values N = New dataset C = Correction of existing Verify dataset	Light-Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-1	**Manufacturer code**	The manufacturer code will be determined from the data submitter's CDX user login profile. The manufacturer code is an alpha-numeric code which identifies a unique vehicle manufacturer. This code is assigned by EPA during the manufacturer registration process.	SupplementalInformationSubmission/SupplementalInformationDetails	EPAManufacturerCode	TRUE	1 per CT Supplemental Information	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Confirmatory Test		CDX From Users Info	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR005 LD-CFT-SI-BR010 LD-CFT-SI-BR011 LD-CFT-SI-BR012 LD-CFT-SI-BR013	already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1) and Model Year (SI-3.5). SI-BR5: Either a shift schedule with the Manufacturer Code (SI-1), Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system, or a shift schedule with the LOD Manufacturer Code, Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system. SI-BR10: If the Process Code (SI-0.5) is equal to 'R' (Report), then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (SI-1) of the dataset for which the report was requested. SI-BR11: If the Process Code (SI-0.5) is equal to 'N' (New) or 'C' (Correction), then the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (SI-1) of the submitted dataset. SI-BR12: If Process Code (SI-0.5) is equal to 'N' (New) then a Decision Information record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5). SI-BR13: If Process Code (SI-0.5) is equal to 'N' (New), then a Supplemental Information record cannot already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5).
SI-2	**Vehicle ID**	Enter the applicable test vehicle identification number for this set of supplemental confirmatory test information. The vehicle ID is a unique, manufacturer-defined, alpha-numeric identification number that is assigned to each manufacturer test vehicle. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting supplemental confirmatory test information.	SupplementalInformationSubmission/SupplementalInformationDetails	VehicleIdentificationText	TRUE	1 per CT Supplemental Information	A(20)	String	1	20							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013	SI-BR1: If Process Code (SI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1) and Model Year (SI-3.5). SI-BR12: If Process Code (SI-0.5) is equal to 'N' (New) then a Decision Information record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5). SI-BR13: If Process Code (SI-0.5) is equal to 'N' (New), then a Supplemental Information record cannot already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5).
SI-3	**Vehicle Configuration #**	Enter the applicable test vehicle configuration number for this set of supplemental confirmatory test information. The vehicle configuration number is used to denote multiple configurations of a single test vehicle ID. The combination of test vehicle ID and vehicle configuration number entered here must be established in Verify's Test Vehicle Information database prior to submitting supplemental confirmatory test information.	SupplementalInformationSubmission/SupplementalInformationDetails	VehicleConfigurationNumber	TRUE	1 per CT Supplemental Information	N(2)	Integer	1	2				0	99		Light Duty	Confirmatory Test	E.g. "01"	Manufacturer	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013	SI-BR1: If Process Code (SI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1) and Model Year (SI-3.5). SI-BR12: If Process Code (SI-0.5) is equal to 'N' (New) then a Decision Information record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5). SI-BR13: If Process Code (SI-0.5) is equal to 'N' (New), then a Supplemental Information record cannot already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5).
SI-3.5	**Model Year**	Enter the model year for which the vehicle is being tested.	SupplementalInformationSubmission/SupplementalInformationDetails	ModelYear	TRUE	1 per CT Supplemental Information	D(4)	Date	4	4	yyyy			1970	2050		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR001a LD-CFT-SI-BR001b LD-CFT-SI-BR004a LD-CFT-SI-BR004b LD-CFT-SI-BR012 LD-CFT-SI-BR013	SI-BR1: If Process Code (SI-0.5) is equal to 'R' (Report) or 'C' (Correction), then a record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1) and Model Year (SI-3.5). SI-BR12: If Process Code (SI-0.5) is equal to 'N' (New) then a Decision Information record must already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5). SI-BR13: If Process Code (SI-0.5) is equal to 'N' (New), then a Supplemental Information record cannot already exist in the system with the same Vehicle ID (SI-2), Vehicle Configuration (SI-3), Manufacturer Code (SI-1), and Model Year (SI-3.5).
SI-4	**Curb weight**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.			TRUE	1 per CT Supplemental Information	N(5)	Integer						0	14000		Light Duty	Confirmatory Test	VI-29	Verify	Back End	Pre Existing Data	
SI-5	**Drive axle weight w/ empty tank of fuel**	Enter the actual or estimated drive axle weight with an empty fuel tank for this test vehicle configuration. The weight must be provided in units of pounds.	SupplementalInformationSubmission/SupplementalInformationDetails	DriveAxleWeightEmptyTankValue	TRUE	1 per CT Supplemental Information	N(5)	Integer						200	14,000		Light Duty	Confirmatory Test	200 <= WEIGHT <= 14,000	Manufacturer	Front End	XML		
SI-6	**Drive axle weight w/ full tank of fuel**	Enter the actual or estimated drive axle weight with a full fuel tank for this test vehicle configuration. The weight must be provided in units of pounds.	SupplementalInformationSubmission/SupplementalInformationDetails	DriveAxleWeightFullTankValue	TRUE	1 per CT Supplemental Information	N(5)	Integer						200	14,000		Light Duty	Confirmatory Test	200 <= WEIGHT <= 14,000	Manufacturer	Front End	XML		

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-7	**Test Drive Code**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	TRUE	1 per CT Supplemental Information	N(1)	Enumeration								Look-Up Values: 4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light Duty	Confirmatory Test	VI-13	Verify	Back End	Pre Existing Data		
SI-8	**Steering Wheel Location**	Select the applicable code specifying the location of the steering wheel for this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails	SteeringWheelLocationIdentifier	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Look-Up Values: L = Left-hand side R = Right-hand side	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-9	**Displacement**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	TRUE	1 per CT Supplemental Information	N(5,3)	Decimal				5	3				Light Duty	Confirmatory Test	VI-22 XX.XXX in Liters	Verify	Back End	Pre Existing Data		
SI-10	**Engine type code**	Select the applicable numeric code specifying the type of engine design for this test vehicle. For example, '1' = Otto spark. Other possible values include diesel, hybrid, gas turbine, fuel cell, etc.	SupplementalInformationSubmission/SupplementalInformationDetails	LightDutyEngineTypeIdentifier	TRUE	1 per CT Supplemental Information	N(2)	Enumeration								Look-Up Values: 1 = Otto Spark 2 = Stratified Charge 3 = Diesel 4 = Gas Turbine 5 = Rankine 6 = Stirling 7 = Hybrid 8 = Fuel Cell 99 = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-12	**Equivalent test weight (ETW)**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	TRUE	1 per CT Supplemental Information	N(5)	Integer						0	14000		Light Duty	Confirmatory Test	VI-30 check range between 00000 <= WEIGHT <= 14000	Verify	Back End	Pre Existing Data		
SI-13	**Equivalent test weight unit**	Value will automatically be set to 'P' = pounds.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	EquivalentTestWeightUnitIdentifier	TRUE	1 per CT Supplemental Information	A(1)	String								P = Pounds	Light Duty	Confirmatory Test	Assigned default value = "P"	Verify	Back End	Assigned		
SI-14	**Model code**	Will be set automatically to '1' (sedan).	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	ModelYear	TRUE	1 per CT Supplemental Information	A(2)	String								1 = Sedan	Light Duty	Confirmatory Test	Assigned default value = "1"	Verify	Back End	Assigned		
SI-15	**Vehicle Type Description**	Will be set automatically to '01' (Cert Emission Data).	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	VehicleTypeDescriptionText	TRUE	1 per CT Supplemental Information	N(2)	Integer								1 = Cert Emission Data	Light Duty	Confirmatory Test	Assigned default value = "1"	Verify	Back End	Assigned		
SI-16	**Front wheel tire pressure**	Enter the front wheel tire pressure used for dynamometer testing of this test vehicle, in units of pounds per square inch.	SupplementalInformationSubmission/SupplementalInformationDetails	FrontWheelTirePressureValue	TRUE	1 per CT Supplemental Information	N(3)	Integer									Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-17	**Rear wheel tire pressure**	Enter the rear wheel tire pressure used for dynamometer testing of this test vehicle, in units of pounds per square inch.	SupplementalInformationSubmission/SupplementalInformationDetails	RearWheelTirePressureValue	TRUE	1 per CT Supplemental Information	N(3)	Integer									Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-18	**Rim and tire size**	Enter the standard tire/rim size description as imprinted on the side wall of the tire.	SupplementalInformationSubmission/SupplementalInformationDetails	RimAndTireSizeDescriptionText	TRUE	1 per CT Supplemental Information	A(20)	String	1	20							Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-19	**Driver selectable transmission?**	Does this test vehicle have a driver-selectable transmission?	SupplementalInformationSubmission/SupplementalInformationDetails	DriverSelectableTransmissionIndicator	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Look-Up Values: Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-20	**Transmission mode tested description**	Enter a description of the driver-selectable transmission mode that should be used for this test. For example, drive in fully automatic mode or using the select shift mode. This field is required if Driver Selectable Transmission' = 'Y'.	SupplementalInformationSubmission/SupplementalInformationDetails	DriverSelectableTransmissionDescriptionText	FALSE	1 per CT Supplemental Information	A(50)	String	1	50							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR002	SI-BR2: If Driver Selectable Transmission (SI-19) is equal to 'Y' (Yes), then Transmission Mode Tested Description (SI-20) is required.
SI-21	**Transmission Configuration Code**	The value for this field will be determined from the values entered for 'transmission type', 'transmission lockup', creeper gear', and 'number of transmission gears' that are part of the Test Vehicle Information dataset that was previously entered.	n/a	n/a	TRUE	1 per CT Supplemental Information	N(2)	Enumeration								1 - A AUTOMATIC <3 OR >8-SPEED (NO LOCKUP) 2 - M3 MANUAL 3-SPEED(NO CREEPER) 3 - M4 MANUAL 4-SPEED(NO CREEPER) 4 - M5 MANUAL 5-SPEED(NO CREEPER) 5 - SA SEMI-AUTOMATIC 6 - A3 AUTOMATIC 3-SPEED(NO LOCKUP) 7 - L3 AUTOMATIC 3-SPEED (LOCKUP) 8 - A4 AUTOMATIC 4-SPEED(NO LOCKUP) 9 - L4 AUTOMATIC 4-SPEED (LOCKUP) 10 - C5 MANUAL 5-SPEED(CREEPER) 12 - C3 MANUAL 3-SPEED (CREEPER) 13 - SA3 SEMI-AUTOMATIC 3-SPEED 15 - SA3 SEMI-AUTOMATIC 3-SPEED 17 - SA4 SEMI-AUTOMATIC 4-SPEED 18 - SA5 SEMI-AUTOMATIC 5-SPEED 20 - M6 MANUAL 6-SPEED(NO CREEPER) 21 - A5 AUTOMATIC 5-SPEED(NO LOCKUP) 22 - L5 AUTOMATIC 5-SPEED (LOCKUP) 23 - C6 MANUAL 6-SPEED(CREEPER) 24 - A6 AUTOMATIC 6-SPEED(NO LOCKUP) 25 - SA6 SEMI-AUTOMATIC 6-SPEED 26 - L6 AUTOMATIC 6-SPEED (LOCKUP) 27 - L7 AUTOMATIC 7-SPEED (LOCKUP) 28 - SA7 SEMI-AUTOMATIC 7-SPEED 29 - A7 AUTOMATIC 7-SPEED(NO LOCKUP) 30 - M7 MANUAL 7-SPEED(NO CREEPER) 31 - C7 MANUAL 7-SPEED(CREEPER) 32 - L8 AUTOMATIC 8-SPEED (LOCKUP) 33 - SA8 SEMI-AUTOMATIC 8-SPEED 34 - A8 AUTOMATIC 8-SPEED(NO LOCKUP) 35 - M8 MANUAL 8-SPEED(NO CREEPER) 36 - C8 MANUAL 8-SPEED (CREEPER) 37 - M MANUAL <3 OR >8-SPEED 40 - CA CVT/Automatic 1-SPEED (NO CREEPER) 51 - AM2 AUTOMATIC-MANUAL 2-SPEED 52 - AM3 AUTOMATIC-MANUAL 3-SPEED 53 - AM4 AUTOMATIC-MANUAL 4-SPEED 54 - AM5 AUTOMATIC-MANUAL 5-SPEED 55 - AM6 AUTOMATIC-MANUAL 6-SPEED 56 - AM7 AUTOMATIC-MANUAL 7-SPEED 57 - AM8 AUTOMATIC-MANUAL 8-SPEED 58 - AM AUTOMATIC-MANUAL <2 OR >8-SPEED 99 - OTHER	Light Duty	Confirmatory Test	VI-36, VI-38, VI-39, VI-40	Verify	Back End	Pre Existing Data		
SI-24	**Vehicle purpose**	Select the appropriate purpose for this test.			TRUE	1 per CT Supplemental Information	N(2)	Enumeration								'01' = Emission Data Vehicle (EDV) '31' = Fuel Economy	Light Duty	Confirmatory Test	DI-25.1	Verify	Back End	Pre Existing Data		
SI-26	**Nominal main tank capacity**	Enter the nominal main fuel tank capacity of the test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails	FuelTankCapacityMeasure	FALSE	1 per CT Supplemental Information	N(4,1)	Decimal				4	1	0	999.9		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR017	SI-BR17: If Test Fuel Type Code for EPA Confirmatory Testing (DI-38.5) is not equal to '50' (Hydrogen) or '62' (electricity), then Nominal Main Fuel Tank Capacity (SI-26) and Fuel Tank Capacity Unit (SI-27) are required.

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-27	**Fuel tank capacity unit**	Select the applicable fuel tank units. 'G' = gallons; 'L' = liters	SupplementalInformationSubmission/SupplementalInformationDetails	FuelTankCapacityUnitIdentifier	FALSE	1 per CT Supplemental Information	A(1)	Enumeration								'G' = gallons 'L' = liters	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR017	SI-BR17: If Test Fuel Type Code for EPA Confirmatory Testing (DI-38.5) is not equal to '50' (Hydrogen) or '62' (electricity), then Nominal Main Fuel Tank Capacity (SI-26) and Fuel Tank Capacity Unit (SI-27) are required.
SI-28	**Nominal auxiliary tank capacity**	Enter the nominal auxiliary tank capacity of the test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails	AuxiliaryFuelTankCapacityMeasure	FALSE	1 per CT Supplemental Information	N(4,1)	Decimal				4	1	0	999.9		Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-29	**Electric dyno target coefficient A**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(6,3)	Decimal				6	3	-999.999	999.999		Light Duty	Confirmatory Test	VI-41	Verify	Back End	Pre Existing Data		
SI-30	**Electric dyno target coefficient B**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(6,5)	Decimal				6	5	-9.99999	9.99999		Light Duty	Confirmatory Test	VI-42	Verify	Back End	Pre Existing Data		
SI-31	**Electric dyno target coefficient C**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Confirmatory Test	VI-43	Verify	Back End	Pre Existing Data		
SI-32	**Electric dyno set coefficient A**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(6,3)	Decimal				6	3	-999.999	999.999		Light Duty	Confirmatory Test	VI-44	Verify	Back End	Pre Existing Data		
SI-33	**Electric dyno set coefficient B**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(6,5)	Decimal				7	6	-9.999999	9.999999		Light Duty	Confirmatory Test	VI-45	Verify	Back End	Pre Existing Data		
SI-34	**Electric dyno set coefficient C**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	FALSE	1 per CT Supplemental Information	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Confirmatory Test	VI-46	Verify	Back End	Pre Existing Data		
SI-35	**Shift Indicator Light Code**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered.	n/a	n/a	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Look-Up Table Values '1' = not equipped '2' = equipped, not shifted by SIL; '3' = equipped, shifted by SIL; '5' = equipped, shifted by Survey Schedule.	Light Duty	Confirmatory Test	VI-14	Verify	Back End	Pre Existing Data		
SI-37	**Target Coastdown Time**	The 55 mph to 45 mph coastdown time (in seconds) from the track (target) coastdown. This field is optional. If a value is entered, this will trigger the need to conduct a 55-45 mph coastdown.	SupplementalInformationSubmission/SupplementalInformationDetails	TargetCoastDownTimeValue	FALSE	1 per CT Supplemental Information	N(5,2)	Decimal				5	2	-999.99	999.99		Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
NEW SI-37.5	**Nominal Hybrid Battery Voltage (Volts)**	**Enter the nominal hybrid battery voltage for this test vehicle in volts.**	**SupplementalInformationSubmission/SupplementalInformationDetails**	**NominalHybridBatteryVoltageValue**	**FALSE**	**1 per CT Supplemental Information**	**N(3)**	**Integer**						**0**	**999**		**Light Duty**	**Confirmatory Test**		**Manufacturer**	**Front End**	**XML**	**NEW: LD-CFT-SI-BR026**	**NEW: If Hybrid Indicator (VI-10.6) is equal to "Yes", then Nominal Hybrid Battery Voltage (SI-37.5) is required, otherwise it is not allowed.**
NEW SI-37.6	**Maximum Hybrid Battery Current (amps)**	**Enter the maximum hybrid battery system current for this test vehicle in amps.**	**SupplementalInformationSubmission/SupplementalInformationDetails**	**MaximumHybridBatteryCurrentValue**	**FALSE**	**1 per CT Supplemental Information**	**N(3)**	**Integer**						**0**	**999**		**Light Duty**	**Confirmatory Test**		**Manufacturer**	**Front End**	**XML**	**NEW: LD-CFT-SI-BR027**	**NEW: If Hybrid Indicator (VI-10.6) is equal to "Yes", then "Maximum Hybrid Battery Current" (SI-37.6) is required, otherwise it is not allowed.**
SI-38	**Canister loading?**	Select 'Y' = Evaporative emission control canister is loaded with butane or gasoline vapor prior to the start of an emission or fuel economy test or 'N' = No loading required.	SupplementalInformationSubmission/SupplementalInformationDetails	CanisterLoadingIndicator	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-39	**Number of canisters**	The number of evaporative emission control canisters on this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails	TotalCanisterCount	FALSE	1 per CT Supplemental Information	N(2)	Integer						1	18		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003	SI-BR3: If Canister Loading (SI-38) is equal to 'Y' (Yes), then Number of Canisters (SI-39) is required and Canister Working Capacity (SI-40) and Total Canister Volume (SI-41) are required for each canister.
	Cannister Details	**Enter the working capacity and total volume for each cannister.**				**1..n**																		
SI-40	**Canister(s) working capacity**	Enter the grams of hydrocarbon which are adsorbed and de-sorbed by loading and purging of the canister on this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails/CanisterDetails	CanisterWorkingCapacityMeasure	FALSE	1 per Canister Number per CT Supplemental Information	N(3)	Integer						0	999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003	SI-BR3: If Canister Loading (SI-38) is equal to 'Y' (Yes), then Number of Canisters (SI-39) is required and Canister Working Capacity (SI-40) and Total Canister Volume (SI-41) are required for each canister.
SI-41	**Total canister volume**	Enter the total canister volume, in cubic centimeters, of activated carbon in the evaporative emission control canisters for this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails/CanisterDetails	TotalCanisterVolumeMeasure	FALSE	1 per Canister Number per CT Supplemental Information	N(6)	Integer						0	999999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR003	SI-BR3: If Canister Loading (SI-38) is equal to 'Y' (Yes), then Number of Canisters (SI-39) is required and Canister Working Capacity (SI-40) and Total Canister Volume (SI-41) are required for each canister.
	Engine Cooling Fan Placement Details	**Enter the primary and additional engine cooling fan placement code for each test procedure.**				**1..n**																		

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-41.5	**testProcedureCodesSelectedForEPAConfirmatoryTesting**	Enter all applicable test procedure codes that have been selected for EPA confirmatory testing.	SupplementalInformationSubmission/SupplementalInformationDetails/SupplementalTestProcedureDetails	TestProcedureIdentifier	TRUE	1..n per CT Supplemental Information	N(2)	Enumeration								2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 22 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (DRVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 - CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (DRVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST 62 = ELECTRIC VEHICLE URBAN RANGE TEST 63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 82 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03	Light Duty	Confirmatory Test	Need to use full list of Test Procedures now instead of abbreviated list (below) that is currently being used. ~~2 = CVS 75 and later (w/o can. load)~~ ~~3=HWFE~~ ~~21=Federal fuel 2 day exhaust (w/can load)~~ ~~22 = 2 day Evap~~ ~~25=California fuel 3 day exhaust (w/can load)~~ ~~27 = California fuel 2 day evap~~ ~~62 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ ~~90 = US06~~ ~~Note: This is the same enumeration list as back-end CTDI EPA only list of Test Procedures (aka short list of test procedures)~~	Manufacturer	Front End	XML	LD-CFT-SI-BR004a	SI-BR4: The Test Procedure Codes selected for EPA Confirmatory Testing (SI-41.5) must include all codes that have been selected for EPA testing in the Decision Information submission for that Manufacturer Code (SI-1), Vehicle ID (SI-2), Vehicle Configuration (SI-3), and Model Year (SI-3.5).
NEW: SI-41.6	**Number of UDDS/Highway/US06 Bags/Phases Conducted**	**The number of UDDS/Highway/US06 bags/phases conducted for this test.**			FALSE	**1 per test (Test Procedure = Charge Depleting UDDS, Highway, US06 only)**	N(2)	**Integer**						**1**	**99**		**Light-Duty**	**Confirmatory Test**		**Verify**	**Back End**	**Pre Existing Data**	**N/A**	**N/A**
SI-42	**Primary engine cooling fan placement code**	The numeric code specifying the position of the engine cooling fan during EPA confirmatory testing. A code must be entered for each test procedure.	SupplementalInformationSubmission/SupplementalInformationDetails/SupplementalTestProcedureDetails	PrimaryCoolingFanPlacementIdentifier	TRUE	1 per entered Test Procedure per CT Supplemental Information	N(2)	Enumeration								1 = One Small Fan - Up - Front 2 = One Small Fan - Down - Front 3 = One Small Fan - Up - Rear 4 = One Small Fan - Down - Rear 5 = One Large Fan - Up - Front (USO6 Only) 6 = One Large Fan - Down - Front (USO6 Only) 7 = One Large Fan - Up - Rear (USO6 Only) 8 = One Large Fan - Down - Rear (USO6 Only) 9 = Other (record in post-test comments) 10 = None	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-44	**Additional vehicle cooling fan placement code**	The numeric code specifying the position of the vehicle side cooling fan during EPA confirmatory testing. A code must be entered for each test procedure.	SupplementalInformationSubmission/SupplementalInformationDetails/SupplementalTestProcedureDetails	AdditionalCoolingFanPlacementIdentifier	TRUE	1 per entered Test Procedure per CT Supplemental Information	N(1)	Enumeration								0 None (default) 1 One Small Fan - Down - Passenger Side 2 One Small Fan - Down - Driver Side 3 One Small Fan - Up - Rear 4 One Small Fan - Down - Rear 5 One Large Fan - Up - Front (USO6 Only) 6 One Large Fan - Down - Front (USO6 Only) 7 One Large Fan - Up - Rear (USO6 Only) 8 One Large Fan - Down - Rear (USO6 Only) 9 Other (record in post-test comments)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-46	**Shift schedule ID**	The numeric code specifying the shift schedule to be used for EPA confirmatory testing of this test vehicle. Can be either a previously-entered manufacturer or EPA standard shift schedule.	SupplementalInformationSubmission/SupplementalInformationDetails/SupplementalTestProcedureDetails	ShiftScheduleIdentifier	FALSE	1 per entered Test Procedure per CT Supplemental Information	A(4)	String	**1**	4	[A-Z0-9]{1,4}					Valid Manufacturer Shift Schedule ID ***– or –*** ***Standard EPA Shift Schedule ID:*** FTA = FTP (Automatic) FTS = FTP (Manual w/ SIL) FT3 = FTP (Manual 3-speed) FT4 = FTP (Manual 4-speed) FT5 = FTP (Manual 5-speed) FT6 = FTP (Manual 6-speed) HWA = Highway FE (Automatic) HWS = Highway FE (Manual w/ SIL) HW3 = Highway FE (Manual 3-speed) HW4 = Highway FE (Manual 4-speed) HW5 = Highway FE (Manual 5-speed) HW6 = Highway FE (Manual 6-speed) US6A = US06 (Automatic) SC3A = SC03 (Automatic) 0001 = FTP (FT3) 0002 = FTP (FT4) 0003 = FTP (FT5) 0004 = FTP (FT6) 0005 = FTP (FTA) 0006 = FTP (FTS) 0007 = HWFE (HW3) 0008 = HWFE (HW4) 0009 = HWFE (HW5) 0010 = HWFE (HW6) 0011 = HWFE (HWA) 0012 = HWFE (HWS) 0013 = SCO#1 (SCCA)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR005 LD-CFT-SI-BR016	SI-BR5: Either a shift schedule with the Manufacturer Code (SI-1), Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system, or a shift schedule with the LOD Manufacturer Code, Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system. SI-BR16: Shift Schedule ID (SI-46) is required unless the Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' (Federal Fuel 2-day Evap), '27' (California Fuel 2-day Evap), '62' (Electric Vehicle Urban Range Test), or '63' (Electric Vehicle Highway Range Test).
SI-47	**Shift schedule database code**	The system will assign a value of "A" for all sets of CT Supplemental Information.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	ShiftScheduleDatabaseCode	TRUE	1 per entered Test Procedure per CT Supplemental Information	A(1)	String								A	Light Duty	Confirmatory Test	Default to "A"	Verify	Back End	Assigned	LD-CFT-SI-BR005	SI-BR5: Either a shift schedule with the Manufacturer Code (SI-1), Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system, or a shift schedule with the LOD Manufacturer Code, Shift Schedule ID (SI-46) and Shift Schedule Database Code (SI-47) must exist in the system.
SI-49	**Shift schedule ID (for prep)**	Enter the numeric code specifying the shift schedule to be used for the pre-conditioning drive cycle during EPA confirmatory testing of this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails/SupplementalTestProcedureDetails	ShiftSchedulePreparationIdentifier	FALSE	1 per entered Test Procedure per CT Supplemental Information	A(4)	String	1	4							Light Duty	Confirmatory Test		Manufacturer	Front End	XML		

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Original or	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-50	**Vehicle odometer unit**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. The vehicle odometer distance units for this test vehicle. 'M' = miles; 'K' = kilometers	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	OdometerUnitsCode	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Look-Up Values: 'M' = miles 'K' = kilometers	Light Duty	Confirmatory Test	VI-19	Verify	Back End	Assigned		
SI-51	**Vehicle odometer correction factor**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. The multiplicative numeric adjustment factor used in the equations to calculate "system" miles on this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	CorrectionFactorValue	TRUE	1 per CT Supplemental Information	N(5,4)	Decimal				5	4				Light Duty	Confirmatory Test	VI-17	Verify	Back End	Assigned		
SI-52	**Odometer Correction sign (+/-)**	The value for this field will be looked-up from the Test Vehicle Information that was previously entered. A '+' or '-' symbol for the odometer correction sign is used to adjust the fuel economy of a test vehicle if the vehicle has over 6200 system miles.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails	CorrectionSignIdentifier	TRUE	1 per CT Supplemental Information	A(1)	Enumeration								Look-Up Values: '+' '-'	Light Duty	Confirmatory Test	VI-18	Verify	Back End	Assigned		
SI-53	**Wheel base**	The distance between the parallel centerlines of the front and rear axle of this test vehicle. This is needed for setting the front and rear roll spacing for testing four wheel drive vehicles on a chassis dynamometer.	SupplementalInformationSubmission/SupplementalInformationDetails	WheelBaseMeasure	TRUE	1 per CT Supplemental Information	N(3)	Integer						0	999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-54	**Wheel base unit**	The wheel base units for the wheel base distance provided above for this test vehicle. 'in' = inches, or 'cm' = centimeters.	SupplementalInformationSubmission/SupplementalInformationDetails	WheelBaseUnitsIdentifier	TRUE	1 per CT Supplemental Information	A(2)	Enumeration								Look-Up Values: 'in' = inches, 'cm' = centimeters	Light Duty	Confirmatory Test		Manufacturer	Front End	XML		
SI-55	**Test Vehicle Information Comments**	Manufacturer defined.	SupplementalInformationSubmission/SupplementalInformationDetails	TestVehicleCommentText	FALSE	1 per CT Supplemental Information	A(1000)	String	1	1000							Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR006	SI-BR6: If Engine Type (SI-10) is equal to 'Other' (99), then Test Vehicle Information Comments (SI-55) are required.
	Exhaust Emissions Standards and Cert Levels entered for each Certification Region																**Light Duty**						**SI-BR18**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-55.5	**Test Group**	The test group that was entered on the original Confirmatory Test Decision Information (DI-7) will be picked up by Verify on the back-end.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	TestGroupName	TRUE	1 per CT Supplemental Information	A(12)	String	12	12							Light Duty	Confirmatory Test	The test group should be pulled in from the Confirmatory Test Decision Information stored on the back-end (DI-7)	Verify	Back End	Assigned	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-56	**Certification Region Code**	Select the applicable certification region codes for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	CertificationRegionCode	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration								CA = California + CAA Section 177 states FA = Federal	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-90	**Certification/In-Use Code**	Verify will assign a default value of "C" (Certification) for all Supplemental Information standards.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	CertificationInUseCode	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeration								C = Certification	Light Duty	Confirmatory Test	Assign a default value = "C"	Verify	Front End	Assigned	LD-CFT-SI-BR014 **LD-CFT-SI-BR018**	SI-BR14: Exhaust Certification/In-Use Code (SI-90) must equal 'C' (Certification). SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-91	**Vehicle Class**	Select the applicable vehicle class for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	VehicleClassIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(4)	Enumeration								For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2 MDV GVW 10001-14000)	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 LD-CFT-SI-BR025	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required. SI-BR25: The EPA Vehicle Class (SI-91) cannot be equal to 'LDVT' (LDV + LDT1) at the Exhaust Emission Standard Level.
SI-57A	**Exhaust Emission Standard Level**	Select the applicable standard level for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardLevelIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(5)	Enumeration								B1 = Bin 1 B2 = Bin 2 B3 = Bin 3 B4 = Bin 4 B5 = Bin 5 B6 = Bin 6 B7 = Bin 7 B8 = Bin 8 B9 = Bin 9 B10 = Bin 10 B11 = Bin 11 HDV1 = Fed Heavy Duty Chassis Cert Std HDV2 = Fed Heavy Duty Chassis Cert Std L2 = CARB LEV2 LEV L2OP = CARB LEV2 LEV Optional U2 = CARB LEV2 ULEV S2 = CARB LEV2 SULEV ZEV = CARB ZEV OT = Other	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 LD-CFT-SI-BR024	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required. SI-BR24: If the Certification Region Code (SI-56) is 'FA' (Federal) then the Exhaust Emission Standard Level (SI-57A) should be a Federal Standard.
SI-56.5	**Fuel**	Select the applicable fuel for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	FuelIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(3)	Enumeration								**G - Gasoline** **D - Diesel** **M - Methanol** **E - Ethanol** **CNG - Compressed Natural Gas** **LNG - Liquified Natural Gas** **LPG - Liquid Petroleum Gas** **H - Hydrogen** ~~**BE - Battery Electric**~~ **EL - Electricity** ~~**NA - Not applicable**~~	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018 NEW: LD-CFT-SI-IB001a	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required. NEW: "NA" is not a valid value for Fuel (SI-56.5).
SI-92	**Test Procedure**	Enter the applicable test procedure for this exhaust emission standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	TestProcedureIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(2)	Enumeration								2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 21 = FED FUEL 2 DAY EVH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EVH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EVH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EVH (BUTANE LOAD) 37 - CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EVH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EVH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST ~~62 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 2D Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 90 = US06 95 = SC03	Light-Duty	Confirmatory Test		Manufacturer	Front end	XML	LD-CFT-SI-BR018	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-60	**Useful Life Mileage**	Select the applicable useful life mileage for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	UsefulLifeMileageIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(3)	Enumeration								4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR018	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-59	**Test Result/Emission Name**	Select the applicable emission name for this exhaust standard.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	TestResultIdentifier	TRUE	1 per combination of Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(16)	Enumeration								CO (Carbon Monoxide) CO2 (Carbon Dioxide) **CREE (Carbon-Related Exhaust Emissions)** **OPT-CREE (Optional Carbon-Related Exhaust Emissions)** NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NMI (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NMH-NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NMH-NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANOL (CH3OH) (Methanol) **N2O (Nitrous Oxide)** SPITBACK (Spitback Hydrocarbon in grams) **Allowed For Charge Depleting Test Procedures Only:** **AMP-HRS- Integrated Amp-hours** **START-SOC- System Start State of Charge Watt-hours** **END-SOC- System End State of Charge Watt-hours** **ACT-DISTANCE- Actual Distance Driven (miles)** **AS-VOLT - Average System Voltage**	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018** **Add LD-CFT-SI-BR028** **LD-CFT-SI-BR020** **LD-CFT-SI-BR022 LD-CFT-SI-IB003a** **NEW**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required. SI-BR20: If the Exhaust Standard Test Procedure (SI-92) is an ORVR (24 or 44) or Running Loss (32 or 37) test, then a Test Result/Emission Name (SI-59) of 'HC-TOTAL' is not allowed. SI-BR22: An Exhaust Standard Test Result/Emission Name (SI-59) of 'HC' is only allowed for ORVR (Test Procedure (SI-92) equal to 24 or 44) or Running Loss (Test Procedure (SI-92) equal to 32 or 37) tests. **NEW:** **The following values for Test Result Emission Name (SI-59) are not valid: 'CREE' (Carbon-Related Exhaust Emissions), 'Opt-CREE' (Optional Carbon-Related Exhaust Emissions), 'AMP-HRS' (Integrated Amp-hours), 'START-SOC' (System Start State of Charge Watt-hours), 'END-SOC' (System End State of Charge Watt-hours), 'ACT-DISTANCE' (Actual Distance Driven (miles)), or 'AS-VOLT' (Average System Voltage).**
SI-61	**Emission Standard Value**	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Emission Standard Value (Text)" (SI-62).	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	EmissionStandardValue	TRUE	1..1 for each unique set of exhaust standard/DF info.	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	Confirmatory Test		Verify	Back End	Assigned	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-62	**Emission Standard Value (Text)**	Enter the applicable numeric value for this exhaust standard name including any additional digits that are necessary for proper rounding.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	ExhaustEmissionsStandardValueText	TRUE	1..1 for each unique set of exhaust standard/DF info.	A(8)	Numeric string			([0-9][1,3])|([0-9][1,4])|([\.][0-9][1,4])|([0-9][1,3])|[?]						Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-58	**Exhaust Deterioration Factor Type**	Select the applicable deterioration factor type for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	TRUE	1..1 for each unique set of exhaust standard/DF info.	A(4)	Enumeration								MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed in the emission data vehicle	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-58.5	**Using NMOG/NMHC Ratio?**	If this is an NMOG standard, is the NMOG/NMHC ratio being used?	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	NMOGToNMHCRatioIndicator	FALSE	1..1 for each unique set of exhaust standard/DF info.	A(1)	Enumeration								Y = Yes N = No	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-58.6	**Ratio of NMOG/NMHC**	If applicable, enter the value for the NMOG/NMHC ratio for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	NMOGToNMHCRatioValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(3,2)	Decimal				3	2	0.00	9.99		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-63	**Additive DF**	If applicable, enter the additive deterioriation factor (DF) value for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	AdditiveDeteriorationFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	0	9.999999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	~~SI-BR7~~ **LD-CFT-SI-BR018**	~~SI-BR7: A value can either be entered for additive or multiplicative, but not both.~~ SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-64	**Multiplicative DF**	If applicable, enter the multiplicative deterioriation factor (DF) value for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	MultiplicativeDeteriorationFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(4,3)	Decimal				4	3	1	9.999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	~~SI-BR7~~ **LD-CFT-SI-BR018**	~~SI-BR7: A value can either be entered for additive or multiplicative, but not both.~~ SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-93	**Upward Diesel Adjustment Factor**	If applicable, enter the upward diesel adjustment factor value for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	UpwardDieselAdjustmentFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR008 **LD-CFT-SI-BR018**	SI-BR8: If Fuel (SI-56.5) is equal to 'D' (Diesel), then Upward Diesel Adjustment Factor (SI-93) is required. SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-94	**Downward Diesel Adjustment Factor**	If applicable, enter the downward diesel adjustment factor value for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	DownwardDieselAdjustmentFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR009 **LD-CFT-SI-BR018**	SI-BR9: If Fuel (SI-56.5) is equal to 'D' (Diesel), then Downward Diesel Adjustment Factor (SI-94) is required. SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-65	**Reactivity Factor (RAF)**	If applicable, enter the reactivity factor for this exhaust standard name.	SupplementalInformationSubmission/SupplementalInformationDetails/ExhaustEmissionsStandardDetails	ReactivityFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(5)	Integer						0	99.999		Light Duty	Confirmatory Test	use for NMOG, Methane. Note: for Tier 2 (Bin 1-11) emissions it will be defaulted to 1.0 for NMOG and 0.0 for Methane	Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
SI-67	**Exhaust/Evaporative Emission Standard Comments**	Enter any additional comments for the exhaust or evaporative standards for this test vehicle.	SupplementalInformationSubmission/SupplementalInformationDetails	EmissionsStandardCommentText	FALSE	1 per test vehicle configuration	A(1000)	String	1	1000							Light Duty	Confirmatory Test	Data type exists	Manufacturer	Front End	XML	**LD-CFT-SI-BR018**	SI-BR18: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '2', '3', '21', '25', or '90', then at least one Exhaust Standard for the test procedure (SI-92) is required.
	Evaporative and Refueling Emission Standards and Cert Levels Entered For Each Certified Region Code																						~~SI-BR19~~	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-95	**Evaporative/Refueling Family Name**	The evaporative/refueling family that was entered on the original Confirmatory Test Decision Information (DI-8) will be picked up by Verify on the back-end.	SupplementalInformationSubmission/SupplementalInformationDetails/EPAGeneratedSupplementalInformationDetails/EPAGeneratedEvaporativeEmissionCertificationLevelDetails	EvaporativeRefuelingFamilyName	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(12)	String	12	12							Light Duty	Confirmatory Test	The evaporative/refueling family name should be pulled in from the Confirmatory Test Decision Information stored on the back-end (DI-8)	Verify	Back End	Assigned	**LD-CFT-SI-BR019**	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-96	**Certification Region Code**	Select the applicable certification region codes for this evaporative standard.	SupplementalInformationSubmission/SupplementalInformationDetails/EvaporativeEmissionsStandardDetails	CertificationRegionCode	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(2)	Enumeration								CA=California + CAA Section 177 states; FA=Federal	Light Duty	Confirmatory Test	Need to assign a new data element number and insert in schema since SI-56 is for the exhaust standards, not evap.	Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-97	**Certification/In-Use Code**	Verify will assign a default value of "C" (Certification) for all Supplemental Information standards.	SupplementalInformationSubmission/SupplementalInformationDetails/EvaporativeEmissionsStandardDetails	CertificationInUseCode	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(2)	Enumeration								C = Certification	Light Duty	Confirmatory Test	Assign a default value = "C"	Verify	Front End	Assigned	LD-CFT-SI-BR015 LD-CFT-SI-BR019	SI-BR15: Evaporative Certification/In-Use Code (SI-97) must equal 'C' (Certification). SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-57B	**Evaporative/Refueling Standard Level**	Select the applicable standard level for this evaporative standard.	SupplementalInformationSubmission/SupplementalInformationDetails/EvaporativeEmissionsStandardDetails	EvaporativeEmissionsStandardLevelIdentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(4)	Enumeration								T1 - Tier 1 Enhanced Evap (2 day + 3 Day) T2 - Federal Tier 2 Evap F2 - Federal Lev-II Evap C2 - CA Lev-II Evap ZZ - CA Lev-II Zero Evap HD-2D = Heavy-Duty 2-Day Evap (1.75 grams) HD-3D = Heavy-Duty 3-Day Evap (1.4 grams) OT = Other	Light Duty	Confirmatory Test	Note- T1 previously called ENHA in CFEIS	Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-80	**Fuel**	Select the applicable fuel for this evaporative standard.	SupplementalInformationSubmission/SupplementalInformationDetails/EvaporativeEmissionsStandardDetails	FuelIdentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(3)	Enumeration								G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-98	**Test Procedure**	Enter the applicable test procedure for this evaporative emission standard.	SupplementalInformationSubmission/SupplementalInformationDetails/EvaporativeEmissionsStandardDetails	TestProcedureIdentifier	TRUE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	N(2)	Enumeration								2 = CVS 75 AND LATER (W/O CAN. LOAD) 3 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 - CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST ~~62 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting JD Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C 96 = US06 95 = SC03	Light-Duty	Confirmatory Test		Manufacturer	Front end	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Confirmatory Test Supplemental Information																								
SI-72	**Useful Life Mileage**	Select the applicable useful life mileage for this evaporative standard.	SupplementalInformationSubmissionSupplementalInformationDetails/EvaporativeEmissionsStandardDetails	UsefulLifeMileageIdentifier	TRUE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	N(3)	Enumeration								4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-71	**Test Result/Emission Name**	Select the applicable emission name for this evaporative standard.	SupplementalInformationSubmissionSupplementalInformationDetails/EvaporativeEmissionsStandardDetails	TestResultIdentifier	TRUE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(16)	Enumeration								HC-TOTAL (Total Hydrocarbon) CO (Carbon Monoxide) CO2 (Carbon Dioxide) **CREE (Carbon-Related Exhaust Emissions)** **OPT-CREE (Optional Carbon-Related Exhaust Emissions)** NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) NC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) NC-NMHNOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) NC-NMHNOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANOL (CH3OH) (Methanol) **N2O (Nitrous Oxide)** SFTBACK (Spitback Hydrocarbon in grams) **Allowed For Charge Depleting Test Procedures Only:** **AMP-HRS- Integrated Amp-hours** **START-SOC- System Start State of Charge Watt-hours** **END-SOC- System End State of Charge Watt-hours** **ACT-DISTANCE- Actual Distance Driven (miles)**	Light Duty	Confirmatory Test	**CREE and Opt-CREE are not valid values here since DFs and Standards will not be submitted for them.**	Manufacturer	Front End	XML	**LD-CFT-SI-BR019** **LD-CFT-SI-BR021** **LD-CFT-SI-BR029** **LD-CFT-SI-BR023 LD-CFT-SI-IB003b** **NEW**	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required. SI-BR21: If the Evaporative Standard Test Procedure (SI-98) is an ORVR (24 or 44) or Running Loss (32 or 37) test, then a Test Result/Emission Name (SI-71) of 'HC-TOTAL' is not allowed. SI-BR23: An Evaporative Test Result/Emission Name (SI-71) of 'HC' is only allowed for ORVR (Test Procedure (SI-98) equal to 24 or 44) or Running Loss (Test Procedure (SI-98) equal to 32 or 37) tests. **NEW: "CREE", "Opt-CREE", "Integrated Amp-hours", "System Start State of Charge Watt-hours", "System End State of Charge Watt-hours", and "Actual Distance Driven (miles)" are not valid values for Test Result Emission Name (SI-71).**
SI-74	**Evaporative Emission Standard Value**	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Evaporative Emission Standard Value (Text)" (SI-75) .	SupplementalInformationSubmissionSupplementalInformationDetails/EPAGeneratedEvaporativeEmissionCertificationLevelDetails	EvaporativeEmissionsStandardValue	TRUE	1..1 for each unique set of evap standard/DF info.	N(7,4)	Decimal				7	4	0.0000	999.9999		Light Duty	Confirmatory Test		Verify	Back End	Assigned	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-75	**Evaporative Emission Standard Value (Text)**	Enter the applicable numeric value for this evaporative standard name including any additional digits that are necessary for proper rounding.	SupplementalInformationSubmissionSupplementalInformationDetails/EvaporativeEmissionsStandardDetails	EvaporativeEmissionsStandardValueText	TRUE	1..1 for each unique set of evap standard/DF info.	A(8)	String	1	8	([0-9][1,3]|[0-9][1,4])|([\.][0-9][1,4])|([0-9][1,3][\.][?]						Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-73	**Evaporative Deterioration Factor Type**	Select the applicable deterioration factor type for this evaporative standard.	SupplementalInformationSubmissionSupplementalInformationDetails/EvaporativeEmissionsStandardDetails	DeteriorationFactorTypeIdentifier	TRUE	1..1 for each unique set of evap standard/DF info.	A(4)	Enumeration								MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed in the emission data vehicle	Light Duty	Confirmatory Test		Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.
SI-76	**Additive DF**	Enter the additive deterioration factor (DF) value for this evaporative standard name.	SupplementalInformationSubmissionSupplementalInformationDetails/EvaporativeEmissionsStandardDetails	AdditiveDeteriorationFactorValue	FALSE	1..1 for each unique set of evap standard/DF info.	N(7,6)	Decimal				7	6	0	9.999999		Light Duty	Confirmatory Test	Note- Evaporative DFs are only additive, not multiplicative.	Manufacturer	Front End	XML	LD-CFT-SI-BR019	SI-BR19: If a Test Procedure Code Selected for EPA Confirmatory Testing (SI-41.5) is equal to '23' or '27', then at least one Evaporative/Refueling Standard for the Test Procedure (SI-98) is required.

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Carline Information																								
CL-0.5	**Process Code**	Select the desired process code for the current submission.	CarlineSubmission/CarlineInformationDetails	InformationProcessCode	TRUE		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification		Manufacturer	Front End	XML		
CL-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	CarlineSubmission/CarlineInformationDetails	EPAManufacturerCode	TRUE		A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR001 LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR009 LD-CERT-CL-BR010 **LD-CERT-CL-BR012**	CL-BR1: Manufacturer Code (CL-1) must exist in the system. CL-BR2: If Process Code (CL-0.5) equals 'C' (Correction) or 'R' (Report), then a record must already exist in the system with the same Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). CL-BR4: If Process Code (CL-0.5) equals 'N' (New), then a record must not exist in the system for that Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). CL-BR9: If the Process Code (CL-0.5) is equal to 'R' (Report), the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (CL-1) of the dataset for which the report was requested. CL-BR10: If the Process Code (CL-0.5) is equal to 'N' (New) or 'C' (correction) then the Manfacturer Code of the Submission Author Details must match the Manufacturer Code (CL-1) of the submitted dataset. CL-BR12: If this is a Batch Data set then for each Carline with Process Code (CL-0.5) equals 'N' (New) the Carline Code (CL-4), Manufacturer Code (CL-1), Division Code (CL-3) and Model Year (CL-2) must be unique.
CL-2	**Model Year**	Enter the applicable model year for this test group.	CarlineSubmission/CarlineInformationDetails	ModelYear	TRUE		N(4)	Integer						1957	2100		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR004 **LD-CERT-CL-BR012**	CL-BR2: If Process Code (CL-0.5) equals 'C' (Correction) or 'R' (Report), then a record must already exist in the system with the same Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). **CL-BR4: If Process Code (CL-0.5) equals 'N' (New) then the Carline Code (CL-4) must not exist in the system for that Manufacturer Code (CL-1) and Division Code (CL-3) and Model Year (CL-2).** CL-BR12: If this is a Batch Data set then for each Carline with Process Code (CL-0.5) equals 'N' (New) the Carline Code (CL-4), Manufacturer Code (CL-1), Division Code (CL-3) and Model Year (CL-2) must be unique.
CL-3	**Division Code**	Enter the applicable division for this carline.	CarlineSubmission/CarlineInformationDetails	ManufacturerDivisionCode	TRUE		N(2)	Integer						1	99		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR003 **LD-CERT-CL-BR004** **LD-CERT-CL-BR012**	CL-BR2: If Process Code (CL-0.5) equals 'C' (Correction) or 'R' (Report), then a record must already exist in the system with the same Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). CL-BR3: For any sumission, the Division Code (CL-3) must already exist in the system. **CL-BR4: If Process Code (CL-0.5) equals 'N' (New) then the Carline Code (CL-4) must not exist in the system for that Manufacturer Code (CL-1) and Division Code (CL-3) and Model Year (CL-2).** CL-BR12: If this is a Batch Data set then for each Carline with Process Code (CL-0.5) equals 'N' (New) the Carline Code (CL-4), Manufacturer Code (CL-1), Division Code (CL-3) and Model Year (CL-2) must be unique.
CL-4	**Car Line Code**	Enter the applicable carline code (assigned by the manufacturer) for this carline.	CarlineSubmission/CarlineInformationDetails	CarlineCode	TRUE		N(3)	Integer						1	999		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR002a LD-CERT-CL-BR002b LD-CERT-CL-BR004 **LD-CERT-CL-BR012**	CL-BR2: If Process Code (CL-0.5) equals 'C' (Correction) or 'R' (Report), then a record must already exist in the system with the same Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). CL-BR4: If Process Code (CL-0.5) equals 'N' (New), then a record must not exist in the system for that Model Year (CL-2), Division Code (CL-3), Carline Code (CL-4), and Manufacturer Code (CL-1). CL-BR11: If the Process Code (CL-0.5) is 'C' (correction) then there cannot be any locked and active Certificate Summary Information Reorts (CSIs) which reference this Carline Code (CL-4). CL-BR12: If this is a Batch Data set then for each Carline with Process Code (CL-0.5) equals 'N' (New) the Carline Code (CL-4), Manufacturer Code (CL-1), Division Code (CL-3) and Model Year (CL-2) must be unique.
CL-5	**FE Label Carline Class Code**	Enter the applicable class code for this carline **using EPA's FE Label classifications.**	CarlineSubmission/CarlineInformationDetails	CarlineClassCode	TRUE		N(2)	Enumeration								1 = Two-Seaters 2 = Minicompact Cars 3 = Subcompact Cars 4 = Compact Cars 5 = Midsize Cars 6 = Large Cars 7 = Small Station Wagons 8 = Midsize Station Wagons 9 = Large Station Wagons 10 = Small Pickup Trucks 2WD 11 = Small Pickup Trucks 4WD 12 = Standard Pickup Trucks 2WD 13 = Standard Pickup Trucks 4WD 14 = Vans, Cargo Type 15 = Vans, Passenger Type 17 = Special Purpose Vehicle 2WD 18 = Special Purpose Vehicle 4WD 19 = Special Purpose Vehicle Cab Chassis 20 = Minivan 2WD 21 = Minivan 4WD 22 = SUV 2WD 23 = SUV 4WD 24 = Electric Vehicles	Light Duty	Certification		Manufacturer	Front End	XML	**NEW: LD-CERT-CL-BR013** **NEW: LD-CERT-CL-BR014** **NEW: LD-CERT-CL-BR015** **NEW: LD-CERT-CL-BR016** **NEW: LD-CERT-CL-BR017** **NEW: LD-CERT-CL-BR018** **NEW: LD-CERT-CL-BR019** **NEW: LD-CERT-CL-BR020**	**NEW: If FE Label Carline Class Code is 2 (Minicompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be less than 85.** **NEW: If FE Label Carline Class Code is 3 (Subcompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 85 and less than 100.** **NEW: If FE Label Carline Class Code is 4 (Compact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 100 and less than 110.** **NEW: If FE Label Carline Class Code is 5 (Midsize Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 110 and less than 120.** **NEW: If FE Label Carline Class Code is 6 (Large Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 120.** **NEW: If FE Label Carline Class Code is 7 (Small Station Wagons) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be less than 130.** **NEW: If FE Label Carline Class Code is 8 (Midsize Station Wagons) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 130 and less than 160.** **NEW: If FE Label Carline Class Code is 9 (Large Station Wagons) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 160.**

EPA Data element number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Carline Information																								
CL-6	**Full Carline Name**	Enter the full carline name for this carline.	CarlineSubmission/CarlineInformationDetails	FullCarlineName	TRUE		A(50)	Normalized string	1	50							Light Duty	Certification		Manufacturer	Front End	XML		
~~CL-8~~	~~Domestic/Import~~	~~Select the applicable~~	~~CarlineSubmis~~	~~DomesticImportCode~~	~~TRUE~~		~~A(1)~~	~~Enumeration~~								~~D=Domestic~~	~~Light Duty~~	~~Certification~~		~~Manufacturer~~	~~Front~~	~~XML~~		
CL-9	**Average Passenger Volume**	Enter the average passenger volume for this carline (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	AveragePassengerVolumeMeasure	FALSE		N(6,3)	Decimal				6	3	0	999.999		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR005 NEW: LD-CERT-CL-BR013 NEW: LD-CERT-CL-BR014 NEW: LD-CERT-CL-BR015 NEW: LD-CERT-CL-BR016 NEW: LD-CERT-CL-BR017 NEW: LD-CERT-CL-BR018 NEW: LD-CERT-CL-BR019 NEW: LD-CERT-CL-BR020	CL-BR5: If the Class Code (CL-5) equals '2' (Mini Compact), '3' (Subcompact), '4' (Compact), '5' (Midsize), '6' (Large), '7' (Small Station Wagon), '8' (Midsize Station Wagon), or '9' (Large Station Wagon) (indicating a passenger vehicle that is not a two-seater) then Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) are required, otherwise not allowed. NEW CL-BR013: If FE Label Carline Class Code is 2 (Minicompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be less than 85. NEW CL-BR014: If FE Label Carline Class Code is 3 (Subcompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 85 and less than 100. NEW CL-BR015: If FE Label Carline Class Code is 4 (Compact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 100 and less than 110. NEW CL-BR016: If FE Label Carline Class Code is 5 (Midsize Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 110 and less than 120. NEW CL-BR017: If FE Label Carline Class Code is 6 (Large Cars) then the sum of
CL-10	**Average Luggage Volume**	Enter the average luggage volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	AverageLuggageVolumeMeasure	FALSE		N(5,3)	Decimal				5	3	0	99.999		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CL-BR005 NEW: LD-CERT-CL-BR013 NEW: LD-CERT-CL-BR014 NEW: LD-CERT-CL-BR015 NEW: LD-CERT-CL-BR016 NEW: LD-CERT-CL-BR017 NEW: LD-CERT-CL-BR018 NEW: LD-CERT-CL-BR019 NEW: LD-CERT-CL-BR020	CL-BR5: If the Class Code (CL-5) equals '2' (Mini Compact), '3' (Subcompact), '4' (Compact), '5' (Midsize), '6' (Large), '7' (Small Station Wagon), '8' (Midsize Station Wagon), or '9' (Large Station Wagon) (indicating a passenger vehicle that is not a two-seater) then Average passenger Volume (CL-9) and Average Luggage Volume (CL-10) are ~~is~~ required, otherwise not allowed. NEW CL-BR013: If FE Label Carline Class Code is 2 (Minicompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be less than 85. NEW CL-BR014: If FE Label Carline Class Code is 3 (Subcompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 85 and less than 100. NEW CL-BR015: If FE Label Carline Class Code is 4 (Compact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 100 and less than 110. NEW CL-BR016: If FE Label Carline Class Code is 5 (Midsize Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 110 and less than 120. NEW CL-BR017: If FE Label Carline Class Code is 6 (Large Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be less than 85. NEW CL-BR014: If FE Label Carline Class Code is 3 (Subcompact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 85 and less than 100. NEW CL-BR015: If FE Label Carline Class Code is 4 (Compact Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 100 and less than 110. NEW CL-BR016: If FE Label Carline Class Code is 5 (Midsize Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 110 and less than 120. NEW CL-BR017: If FE Label Carline Class Code is 6 (Large Cars) then the sum of Average Passenger Volume (CL-9) and Average Luggage Volume (CL-10) rounded to a whole number must be greater than or equal to 120. NEW CL-BR018: If FE Label Carline Class Code is 7 (Small Station Wagons) then the
CL-11	**2-Door Passenger volume**	Enter the 2-door passenger volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	TwoDoorPassengerVolumeMeasure	FALSE		N(3)	Integer						0	200		Light Duty	Certification		Manufacturer	Front End	XML		
CL-12	**2-Door Luggage volume**	Enter the 2-door luggage volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	TwoDoorLuggageVolumeMeasure	FALSE		N(2)	Integer						0	60		Light Duty	Certification		Manufacturer	Front End	XML	~~CL-BR6~~	~~CL-BR6: If Two-Door Passenger Volume (CL-11) is entered then Two-Door Luggage Volume (CL-12) is required).~~
CL-13	**4-Door Passenger volume**	Enter the 4-door passenger volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	FourDoorPassengerVolumeMeasure	FALSE		N(3)	Integer						0	200		Light Duty	Certification		Manufacturer	Front End	XML		
CL-14	**4-Door Luggage volume**	Enter the 4-door luggage volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	FourDoorLuggageVolumeMeasure	FALSE		N(2)	Integer						0	60		Light Duty	Certification		Manufacturer	Front End	XML	~~CL-BR7~~	~~CL-BR7: If Four Door Passenger Volume (CL-13) is entered then Four Door Luggage Volume (CL-14) is required).~~
CL-15	**Hatchback Passenger volume**	Enter the hatchback passenger volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	HatchbackPassengerVolumeMeasure	FALSE		N(3)	Integer						0	200		Light Duty	Certification		Manufacturer	Front End	XML		
CL-16	**Hatchback Luggage volume**	Enter the hatchback luggage volume (in cubic feet).	CarlineSubmission/CarlineInformationDetails/VehicleVolumeMeasureDetails	HatchbackLuggageVolumeMeasure	FALSE		N(2)	Integer						0	60		Light Duty	Certification		Manufacturer	Front End	XML	~~CL-BR8~~	~~CL-BR8: If Hatchback Passenger Volume (CL-15 is entered then Hatchback Luggage Volume (CL-16) is required).~~
CL-17	**Sales Restriction Code**	Select the applicable sales restriction code for this carline.	CarlineSubmission/CarlineInformationDetails	SalesRestrictionCode	FALSE		A(2)	Enumeration								TR=US Territories PO=US Postal Service	Light Duty	Certification		Manufacturer	Front End	XML		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Evaporative Family Information																								
EV-0.5	**Process Code**	Select the desired process code for the current submission.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	InformationProcessCode	TRUE		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset D = Delete existing Verify dataset R = Request Report for an existing Verify dataset	Light-Duty	Certification		Manufacturer	Front End	XML		
EV-19	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	EPAManufacturerCode	TRUE	Once per evaporative family.	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Certification		Verify	Front End	XML	LD-CERT-EV-BR002 LD-CERT-EV-BR009 LD-CERT-EV-BR011 LD-CERT-EV-BR012	EV-BR9: If the Process Code (EV-0.5) is equal to 'R' (Report), the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (EV-19) of the dataset for which the report was requested. EV-BR11: If the Process Code (EV-0.5) is equal to 'N' (New) or 'C' (Correction) the Manufacturer Code of the Submission Author Details must match the Manufacturer Code (EV-19) of the submitted dataset. EV-BR12: Manufacturer Code (EV-19) must exist in the system.
EV-1	**Evap/Refueling Family Name**	Enter the applicable evaporative/refueling name for this dataset.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	EvaporativeRefuelingFamilyName	TRUE		A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}						Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR001a LD-CERT-EV-BR001b LD-CERT-EV-BR002 LD-CERT-EV-BR003 ~~EV-BR4~~ LD-CERT-EV-BR005 LD-CERT-EV-BR013	EV-BR1: If Process Code (EV-0.5) is equal to 'C' (Correction) or 'R' (Report) then a record must already exist in the system with the same Evaporative/Refueling Family Name (EV-1) and Model Year (EV-1.5). EV-BR2: The Manufacturer Code embedded in the Evaporative/Refueling Family Name (EV-1) must match the Submitter's Manufacturer Code (in Submission Author Details). EV-BR3: The canister working capacity embedded in the Evaporative/Refueling Family (EV-1) must be a valid number. ~~EV-BR4: The Evaporative Family type embedded in the Evaporative/Refueling Family EV-1) must be valid.~~ EV-BR5: If Evaporative Summary Information (EVSI) Type (EV-2) equals 'N' (New) then a record must not exist in the system for this Evaporative/Refueling Family Name (EV-1) and Model Year (EV-1.5). EV-BR13: If the Process Code (EV-0.5) is 'C' (Correction) then there cannot be any locked and active Certificate Summary Information Reports (CSIs) which reference this Evaporative Family Name (EV-1)
EV-1.5	**Model Year**	Enter the applicable model year for this evaporative family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	ModelYear	TRUE	Once per evaporative family.	N(4)	Year type (1970-2100)						1957	2100		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR001a LD-CERT-EV-BR001b LD-CERT-EV-BR005	EV-BR1: If Process Code (EV-0.5) is equal to 'C' (Correction) or 'R' (Report) then a record must already exist in the system with the same Evaporative/Refueling Family Name (EV-1) and Model Year (EV-1.5). EV-BR5: If Evaporative Summary Information (EVSI) Type (EV-2) equals 'N' (New) then a record must not exist in the system for this Evaporative/Refueling Family Name (EV-1) and Model Year (EV-1.5).
EV-2	**Evaporative Summary Information (EVSI) Type**	Enter the applicable type for this set of certification information: New, Update for Correction, or Update for Running Change.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	SummaryTypeIdentifier	TRUE		A(1)	Enumeration								N= New, U= Update for correction R= Update for Running change	Light Duty	Certification		Manufacturer	Front End	XML		refer to other industry rules for this field
EV-3	**Integrated ORVR**	Is the ORVR system for this evaporative/refueling family integrated with the evaporative system?	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	IntegratedORVRIndicator	TRUE		A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML		
NEW: EV-3.5	Fuel(s)	Enter all applicable fuels for this test vehicle configuration.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	FuelIdentifier	TRUE	1..n per Evaporative Family	A(3)	Enumeration								**G - Gasoline** **D - Diesel** **M - Methanol** **E - Ethanol** **CNG - Compressed Natural Gas** **LNG - Liquified Natural Gas** **LPG - Liquid Petroleum Gas** **H - Hydrogen** **EL - Electricity** **HYD - Hydraulic**	Light-Duty	Certification	The 'HYD' value is not accepted for this dataset.	Manufacturer	Front end	XML	NEW: LD-CERT-EV-BR014 LD-CERT-EV-IB001 ~~V1-BR11~~	NEW: One of the Fuel(s) (EV-3.5) selected must be "Gasoline" (G), "Methanol" (M), "Ethanol" (E), "Compressed Natural Gas" (CNG), "Liquified Natural Gas" (LNG), or "Liquified Petroleum Gas" (LPG). ~~'NA' is not a valid value for Fuel 1. It is only valid for Fuel 2.~~
NEW EV-3.6	Multiple Fuel Storage - Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	MultipleFuelStorageMethodIdentifier	FALSE	1 per test group	A(8)	Enumeration								S - Fuels Stored Separately T - Fuels Stored Together	Light-Duty	Certification		Manufacturer	Front end	XML	NEW: LD-CERT-EV-BR015	NEW: If more than one fuel is selected for Fuel(s) (EV-3.5), then Multiple Fuel Storage- Separate or Together (EV-3.6) is required, otherwise it is not allowed.
~~EV-4~~	~~Fuel 1~~	~~Enter the first fuel type for this evaporative/refueling family.~~	~~EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails~~	~~Fuel1Identifier~~	~~TRUE~~		~~A(3)~~	~~Enumeration~~								~~G - Gasoline~~ ~~D - Diesel~~ ~~M - Methanol~~ ~~E - Ethanol~~ ~~CNG - Compressed Natural Gas~~ ~~LNG - Liquified Natural Gas~~ ~~LPG - Liquid Petroleum Gas~~ ~~H - Hydrogen~~ ~~BE - Battery Electric~~ ~~NA - Not Applicable~~	~~Light-Duty~~	~~Certification~~		~~Manufacturer~~	~~Front End~~	~~XML~~	~~DELETE EV-BR10~~	~~DELETE: EV-BR10: "NA" should not be listed as one of the valid values for Fuel 1. It is only valid for Fuel 2.~~
~~EV-5~~	~~Fuel 2~~	~~Enter the second fuel type for this evaporative/refueling family if applicable.~~	~~EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails~~	~~Fuel2Identifier~~	~~FALSE~~		~~A(3)~~	~~Enumeration~~								~~G - Gasoline~~ ~~D - Diesel~~ ~~M - Methanol~~ ~~E - Ethanol~~ ~~CNG - Compressed Natural Gas~~ ~~LNG - Liquified Natural Gas~~ ~~LPG - Liquid Petroleum Gas~~ ~~H - Hydrogen~~ ~~BE - Battery Electric~~ ~~NA - Not Applicable~~	~~Light-Duty~~	~~Certification~~		~~Manufacturer~~	~~Front End~~	~~XML~~		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Evaporative Family Information																								
EV-6	**Bladder fuel tank?**	Are the fuel tanks for this evaporative/refueling family equipped with a bladder?	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/FuelTankDetails	BladderTankIndicator	TRUE		A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML		
EV-7	**Fuel tank Material**	Enter the applicable material for the fuel tank for this evaporative/refueling family. Choose 'Other' if both metal and plastic are used, or, some other material or composite is used.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/FuelTankDetails	FuelTankMaterialIdentifier	TRUE		A(2)	Enumeration								M = Metal P = Plastic OT = Other	Light Duty	Certification		Manufacturer	Front End	XML		
EV-8	**Fuel Tank Material description**	Enter a description of the fuel tank.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/FuelTankDetails	FuelTankMaterialOtherText	FALSE		A(100)	Normalized String	1	100							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR006	EV-BR6: If Fuel Tank Material (EV-7) is equal to 'P' (Plastic) or 'OT' (Other) then Fuel Tank Material Description (EV-8) is required.
EV-9	**Fill Pipe Seal Type**	Enter the applicable type of fill pipe seal for this evaporative/refueling family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/FuelTankDetails	FillPipeSealTypeIdentifier	TRUE		A(1)	Enumeration								L = Liquid Seal M = Mechanical Seal	Light Duty	Certification		Manufacturer	Front End	XML		
EV-10	**Air Intake System Vapor Storage Device**	Do vehicles in this evaporative/refueling family have an air intake system vapor storage device?	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	AirIntakeSystemDeviceIndicator	TRUE		A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML		
EV-10.5	**Air Intake System Vapor Storage Device Description**	Describe the airtake system vaport storage device	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	AirIntakeSystemDeviceDescriptionText	FALSE		A(100)	String	1	100							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR007	EV-BR7: If Air Intake System Vapor Storage Device (EV10) is equal to 'Y' (Yes) then Air Intake System Vapor Storage Device Description (EV-10.5) is required.
EV-11	**Fuel System Vapor Storage Canister**	Do vehicles in this evaporative/refueling family have a fuel system vapor storage canister?	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	VaporStorageCanisterIndicator	TRUE		A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML		
EV-12	**Other Vapor Storage**	Enter a description of other vapor storage devices for this evaporative/refueling family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	VaporStorageCanisterDescriptionText	FALSE		A(30)	Normalized String	1	30							Light Duty	Certification		Manufacturer	Front End	XML		
EV-13	**Fuel System Vapor Storage Canister(s) Total Working Capacity**	Enter the total working capacity (in grams) of all primary and secondary (bleed) canisters for this evaporative/refueling family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	CanisterTotalWorkingCapacityMeasure	TRUE		N(4)	Integer						0	9999		Light Duty	Certification		Manufacturer	Front End	XML		
EV-14	**Number of Primary Canisters**	Enter the number of primary canisters for this evaporative/refueling family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	PrimaryCanisterCount	TRUE		N(1)	Integer						0	9		Light Duty	Certification		Manufacturer	Front End	XML		
EV-15	**Number of Bleed Canisters**	Enter the number of bleed canisters for this evaporative/refueling family. Do not include bleed canisters that are internal to primary canisters.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	BleedCanisterCount	TRUE		N(1)	Integer						0	9		Light Duty	Certification		Manufacturer	Front End	XML		
EV-16	**Bleed Canister Total Working Capacity**	Enter the total working capacity of all bleed canisters (in grams).	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails/VaporStorageDetails	BleedCanisterTotalWorkingCapacityMeasure	FALSE		N(4)	Integer						0	9999		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-EV-BR008	EV-BR8: If Number of Bleed Canisters (EV-15) is greater than '0' then Bleed Canister Total Working Capacity (EV-16) is required.
EV-17	**Evap/refueling family system comment**	Enter any additional coments about this evaporative/refueling family.	EvaporativeFamilySubmission/EvaporativeFamilyInformationDetails	ManufacturerCommentText	FALSE		A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																					
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Content ed Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																									
TG-0.5	**Process Code**	Select the desired process code for the current submission.	CertificationData Submission/Certi ficationInformati onDetails	informationProcess Code	TRUE		A(1)	Enumeratio n	1	1						N = New dataset C = Correction of existing Verify dataset	Light-Duty	Certification		Manufact urer	Front End	XML		If Process Code = "R" or "D" or "C" , a record must exist in Verify for the primary key of this module.
TG-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	CertificationData Submission/Certi ficationInformati onDetails	EPAManufacturerC ode	TRUE	Once per test group.	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Certification		Verify	Front End	XML	LD-CERT-TG-BR005 LD-CERT-TG-BR069 LD-CERT-TG-BR070 LD-CERT-TG-BR177	
TG-2	**Test Group**	Enter the applicable test group name for this set of certification information.	CertificationData Submission/Certi ficationInformati onDetails	TestGroupName	TRUE	1..1	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}[0-9]{1}[A-Z0-9]{1,6}?						Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR001a LD-CERT-TG-BR001b LD-CERT-TG-BR002 LD-CERT-TG-BR005 LD-CERT-TG-BR004 LD-CERT-TG-BR006 LD-CERT-TG-BR079 LD-CERT-TG-BR084 LD-CERT-TG-BR101	Test group model year must be current year through current year + 2.
TG-4	**CSI Type**	Enter the applicable type for this set of certification information: New, Update for Correction, or Update for Running Change.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	CertificateTypeIde ntifier	TRUE	Once per test group.	A(1)	Enumeratio n								N = New U = Update For Correction R = Update For Running Change	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR103	N implies this test group must not exist in Verify.
TG-5	**Running Change Reference Number**	When the Update Indicator = "R", enter the running change number or document file name for the running change that was submitted to Verify's document system.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	RunningChangeRe ferenceNumberTex t	FALSE	Once per test group.	A(100)	Normalized string	1	100							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR003	This field must be present when TG-4 is "R".
TG-6	**Model Year**	Enter the applicable model year for this test group.	CertificationData Submission/Certi ficationInformati onDetails	ModelYear	TRUE	Once per test group.	N(4)	Year type (1970-2100)						1957	2100		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR001a LD-CERT-TG-BR001b LD-CERT-TG-BR002 LD-CERT-TG-BR004 LD-CERT-TG-BR084 LD-CERT-TG-BR089 LD-CERT-TG-BR090	Model year must match Test group model year and evap fam model year.
~~TG-3~~	~~**Drive Source**~~	~~Enter the applicable value for the drive source for this test group. Select 'E' for fuel cell electric vehicle.~~	~~CertificationDat aSubmission/Ce rtificationInform ationDetails/Tes tGroupIdentifica tionDetails~~	~~DriveSourceIdenti fier~~	~~TRUE~~	~~Once per test group.~~	~~A(3)~~	~~Enumeratio n~~								~~C = Combustion Engine E = Electric Motor H = Hybrid~~	~~Light Duty~~	~~Certification~~		~~Manufact urer~~	~~Front End~~	~~XML~~		
NEW TG-7.1	**Drive Source**	Enter the applicable value for the drive source for this test group. Select 'E' for fuel cell electric vehicle.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/DriveSou rceDetails	DriveSourceIdenti fier	TRUE	1..2 per Test Group	A(1)	Enumeratio n								C = Combustion Engine E = Electric Motor H = Hybrid	Light Duty	Certification		Manufact urer	Front End	XML	Add LD-CERT-TG-IB001	
NEW TG-7.2	**Hybrid Indicator**	Are the vehicles in this test group hybrid electric vehicles (HEVs) as defined in 40 CFR 86.1803-01?	CertificationDat aSubmission/Ce rtificationInform ationDetails/EP AGeneratedCert ificationDetails	HybridVehicleIndi cator	TRUE	1 per Test Group	A(1)	Enumeratio n								N - No Y - Yes	Light Duty	Certification		Verify	Back End	Assigned	Add LD-CERT-TG-BR105 Add LD-CERT-TG-BR162	If Drive Source = Combustion Engine and Electric Motor then Hybrid Indicator = Yes, otherwise it = No.
NEW TG-7.3	**Fuel(s)**	Enter all applicable fuels for this test vehicle configuration.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/DriveSou rceDetails/FuelId entifierDetails	FuelIdentifier	TRUE	1..n per Drive Source per Test Group	A(3)	Enumeratio n								G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light-Duty	Certification		Manufact urer	Front end	XML	Add LD-CERT-TG-IBR007 Add LD-CERT-TG-BR158 Add LD-CERT-TG-BR159 Add LD-CERT-TG-BR160 Add LD-CERT-TG-IB002a Add LD-CERT-TG-BR106 Add LD-CERT-TG-BR107 ~~VI-BR15~~	If Drive Source = Combustion Engine, Fuel can not equal Electricity. If Drive Source = Electric Motor, Fuel must equal Electricity, Hydrogen, or Methanol. ~~"BAT-1) not a valid value for Fuel 1. It is only valid for Fuel 2.~~
NEW TG-7.4	**Basic fuel metering system**	Enter the applicable fuel metering system type for this test group.	CertificationData	PrimaryFuelMeteri ngSystemIdentifier	FALSE	Once per selected Fuel (TG-7.3) per Drive Source (TG-7.1) per test group	A(4)	Enumeratio n								MFI = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = Gasoline Spark Ignition Direct fuel injection GDPI = Spark Ignition direct & ported injection LMIX = LPG Mixer CRDI = Common Rail Direct Diesel Injection GFI = Gaseous Fuel Injection DDI = Direct Diesel Injection (non-common rail) IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light Duty	Certification		Manufact urer	Front End	XML	Add LD-CERT-TG-IB003 Add LD-CERT-TG-BR108	Required if Drive Source (TG-7.1) = 'C', otherwise not allowed. ~~Required if TG-7 = 'C' or if TG-7 = 'H' and TG-36 = 'SM' or 'EH'. Optional if TG-36 = 'D'.~~
NEW TG-7.4.1	**Lean Burn Strategy Indicator**	Does the fuel metering system employ lean burn strategy (e.g. to significantly improve the fuel economy of the vehicle)?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/DriveSou rceDetails/FuelId entifierDetails	LeanBurnStrategyI ndicator	FALSE	Once per selected Fuel (TG-7.3) per Drive Source (TG-7.1) per test group	A(1)	Enumeratio n								N=No Y=Yes	Light Duty	Certification					Add LD-CERT-TG-BR109	Not allowed if basic fuel metering system (TG-7.4) is CMIX, LMIX, CRDI, GFI, DDI or IDI otherwise required.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
NEW TG-7.5	CREE Weighting Factor for Dual/Multiple Fuel Vehicles	Enter the CREE weighting factor that has been approved by EPA under 600.510(k) for each fuel for dual/multiple fuel vehicles for this test group .	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/Greenho useGasOffcialT estNumberDetail s	WeightFactorValu e	FALSE	Once Per Test Group Fuel (TG-217.1) per test group	N(5,4)	Decimal				5	4	0.0000	1		Light-Duty	Certification		Manufact urer	Front End	XML	Add LD-CERT-TG-IB005 Add LD-CERT-TG-BR110a Add LD-CERT-TG-BR110b Add LD-CERT-TG-BR110c Add LD-CERT-TG-BR111 Add LD-CERT-TG-BR112	This field is required if more than one fuel is selected for the Test Group. Need to add Business Rules for which fuels the weighting factor can/must be entered for. (= 0.5 until model year 2016 if 2 fuels in test group) Business Rule: If more than one Fuel(s) (TG-7.3) is selected for the Test Group when Drive Source (TG-7.1) is 'C' (Combustion Engine), and if model year is greater than or equal to 2012, then CREE Weighting Factor for Dual/Multiple Fuel Vehicles (TG-7.5) is required for each fuel. Otherwise, it is not allowed. All CREE weighting factors must sum to 1.
NEW TG-7.6	Multiple Fuel Storage-Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	MultipleFuelStora geMethoddIentifier	FALSE	1 per test group	A(6)	Enumeratio n								S - Fuels Stored Separately T- Fuels Stored Together	Light-Duty	Certification		Manufact urer	Front end	XML	Add LD-CERT-TG-BR113	Required if more than one fuel is selected for Fuel(s) (TG-7.3) and if Drive Source (TG-7.1) equals Combustion Engine, otherwise not allowed.
NEW TG-7.7	Multiple Fuel Combustion- Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	MultipleFuelComb ustionMethodIdenti fier	FALSE	1 per Test Group	A(6)	Enumeratio n								S- Fuels Combusted Separately T- Fuels Combusted Together	Light-Duty	Certification		Manufact urer	Front end	XML	Add LD-CERT-TG-BR114	If Drive Source (TG-7.1) equals 'C' (Combustion Engine) and if more than one Fuel(s) (TG-7.3) selected is combustible (i.e., "Gasoline" (G), "Diesel" (D), "Methanol" (M), "Ethanol" (E), "Compressed Natural Gas" (CNG), "Liquified Natural Gas" (LNG), or "Liquified Petroleum Gas" (LPG)), and optional for "Hydrogen" (H), then Multiple Fuel Combustion - Separate or Together (TG-7.7) is required. Otherwise, it is not allowed.
NEW TG-7.8	Fuel Cell Indicator	Are vehicles within this test group equipped with a Fuel Cell?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	FuelCellIndicator	FALSE	1 per Test Group	A(1)	Enumeratio n								N - No Y - Yes	Light-Duty	Certification		Manufact urer	Front end	XML	Add LD-CERT-TG-BR115	Required if Drive Source (TG-7.1) equals "E" (Electric Motor), otherwise optional
NEW TG-7.9	Rechargable Energy Storage System Indicator	Are vehicles within this test group equipped with a rechargable energy storage system?	CertificationDat aSubmission/Ce rtificationInform ationDetails/Tes tGroupIdentifica tionDetails	RechargeableEner gyStorageSystemI ndicator	FALSE	1 per Test Group	A(1)	Enumeratio n								N - No Y - Yes	Light-Duty	Certification		Manufact urer	Front end	XML	Add LD-CERT-TG-BR116	Required if Drive Source (TG-7.1) equals "E" (Electric Motor), otherwise optional.
NEW TG-8.3	Offboard Charge Capable Indicator	Select "Yes" if vehicles within this test group are equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	OffBoardChargeCa pabilityIndicator	FALSE	1 per Test Group	A(1)	Enumeratio n								N - No Y - Yes	Light-Duty	Certification Test Data		Manufact urer	Front end	XML	Add LD-CERT-TG-BR117	Required if Drive Source (TG-7.1) equals "E" (Electric Motor), otherwise optional.
~~TG-17~~	~~Fuel 1~~	~~Enter the applicable fuel for this test group.~~	~~CertificationDat aSubmission/Ce rtificationInform ationDetails/Tes tGroupIdentifica tionDetails~~	~~FuelIdentifier~~	~~TRUE~~	~~Once per test group.~~	~~A(3)~~	~~Enumeratio n~~								~~G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen BE - Battery Electric NA - Not Applicable~~	~~Light-Duty~~	~~Certification~~		~~Manufact urer~~	~~Front End~~	~~XML~~	~~Delete LD-CERT-TG-BR014 Delete LD-CERT-TG-BR017~~	~~"NA" should not be displayed as one of the valid values for Fuel 1. It is only valid for Fuel 2.~~
~~TG-18~~	~~Fuel 2~~	~~Enter the second fuel if the "vehicle fuel category" for this test group is flex fuel, flex fuel hybrid, dual fuel, or bi fuel.~~	~~CertificationDat aSubmission/Ce rtificationInform ationDetails/Tes tGroupIdentifica tionDetails~~	~~FuelIdentifier~~	~~FALSE~~	~~Once per test group.~~	~~A(3)~~	~~Enumeratio n~~								~~G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen BE - Battery Electric NA - Not Applicable~~	~~Light-Duty~~	~~Certification~~		~~Manufact urer~~	~~Front End~~	~~XML~~	~~Delete LD-CERT-TG-BR018~~	~~If data element TG-8 = FF, FH, DF or BF then this data element is required, otherwise it is not allowed.~~
~~TG-8~~	~~Vehicle Fuel Category~~	~~Enter the applicable vehicle fuel category for this test group.~~	~~CertificationDat aSubmission/Ce rtificationInform ationDetails/Tes tGroupIdentifica tionDetails~~	~~VehicleFuelCateg oryIdentifier~~	~~TRUE~~	~~Once per test group.~~	~~A(2)~~	~~Enumeratio n~~								~~EF-Single Fuel FF-Flex Fuel (fuel premixed and combusted together) FH- Flex fuel hybrid DF- Dual Fuel (2 separate fuel tanks, separate combustion) BF- Bi Fuel (2 separate fuel tanks, combusted together) HYHybrid EV- Battery Electric FC-Fuel Cell Electric MF- Multi Fuel (More than 2 fuels - TBD)~~	~~Light-Duty~~	~~Certification~~	~~Which enumeration format ?? Additional enumerated values must be determined. Because this field appears changeable, it is a good candidate for business rule validation instead of being an enumeration. Additional validations involving the relationship between this data element and data element TG-7 (see right cell) can best be achieved in a business rule.~~	~~Manufact urer~~	~~Front End~~	~~XML~~	~~Delete LD-CERT-TG-BR008 Delete LD-CERT-TG-BR009 Delete LD-CERT-TG-BR010 Delete LD-CERT-TG-BR014~~	~~If TG-7 = C then TG-8 = EF, FF, DF or BF. If TG-7 = E then TG-8 = EV or FC. If TG-7 = H then TG-8 = FH or HY~~
TG-9	**Federal Clean Fuel Vehicle**	Is this test group being certified to Federal Clean Fuel Vehicle emission standards?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/FederalC leanFuelVehicle Details	CleanFuelIndicator	TRUE	Once per test group.	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR011	IF model year >= 2009 and 5th char = K (Heavy Duty Vehicle) then may not select Y IF model year < 2009 and 5th char = D (Heavy Duty Vehicle) then may not select Y
TG-10	**Federal Clean Fuel Vehicle Standard**	Enter the applicable Clean Fuel Vehicle Standard for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/FederalC leanFuelVehicle Details	CleanFuelStandar dIdentifier	FALSE	Once per test group.	A(4)	Enumeratio n								LEV ULEV ZEV	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR012	Must be present if TG-9 = Y and must not be present if TG-9 = N.
TG-11	**Federal Clean Fuel Vehicle ILEV**	Is this test group being certified to Federal Clean Fuel Vehicle ILEV emission standards?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/FederalC leanFuelVehicle Details	InherentlyLowEmis sionsIndicator	FALSE	Once per test group.	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR013	Must be present if TG-9 = Y and must not be present if TG-9 = N, furthermore if TG-11 = Y then either TG-17 = CNG, LNG or LPG or TG-8 = EV or FC.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-11.5	**California Partial Zero Emissions Vehicle Indicator**	Is this test group being certified to California's partial zero emissions vehicle (PZEV) standards?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	CAPartialZeroEmis sionsIndicator	FALSE	Once per test group.	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML		
TG-12	**Durability Group Name**	Enter the applicable durability group name for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	DurabilityGroupNa me	TRUE	Once per test group.	A(12)	String	12	12	[A-Z0-9](12)						Light Duty	Certification		Manufact urer	Front End	XML		
TG-13	**Durability Group Equivalency Factor**	Enter the applicable durability group equivalency factor.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	DurabilityGroupEq uivalencyFactorVal ue	TRUE	Once per test group.	N(2,1)	Decimal				2	1	0.1	5.0		Light Duty	Certification		Manufact urer	Front End	XML	Add LD-CERT-TG-IB006	
TG-14	**Certification Region Code**	Enter all applicable certification region codes for this test group. This was previously referred to as 'Sales Area' in CFEIS.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/Certificati onRegionDetails	CertificationRegion Code	TRUE	1..2	A(2)	Enumeratio n								CA = California + CAA Section 177 states FA = Federal	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR015 LD-CERT-TG-BR019	
TG-15	**Certification Projected Sales for each Certification Region Code**	Enter the projected sales for each applicable certification region code for this test group(ie- FA, CA+177).	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/Certificati onRegionDetails	CertificationProject edSalesCount	TRUE	1..2	N(7)	Integer						0	9,999,999		Light Duty	Certification		Manufact urer	Front End	XML		Enter projected sales for each selected Region Code.
TG-16	**EPA Vehicle Class**	Enter all applicable vehicle classes for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	VehicleClassIdentif ier	TRUE	1..n	A(2)	Enumeratio n								For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2 MDV GVW 10001-14000)	Light Duty	Certification		Manufact urer	Front End	XML		M6 and M7 can only be selected if TG-14 = CA. "LDVT" is an invalied selection here at the test group level; it can only be selected at the Standards level.
TG-19	**OBD Compliance Type**	Enter the applicable OBD Compliance Type for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/OnBoard DiagnosticDevic eDetails	ComplianceTypeIn dicator	TRUE	Once per test group.	A(1)	Enumeratio n								F = Federal C = CARB	Light Duty	Certification		Manufact urer	Front End	XML		If TG-19 = F then TG-14 cannot = CA
TG-20	**OBD Demonstration Vehicle Test Group**	Enter the test group for the OBD demonstration vehicle.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/OnBoard DiagnosticDevic eDetails	DemonstractionVe hicleTestGroupNa me	TRUE	Once per test group.	A(12)	String	12	12	[A-H1-NP9-TV-Y1-9](1)[A-Z0-9](4,11)[L](1)[A-Z0-9](1,6)?						Light Duty	Certification		Manufact urer	Front End	XML		
TG-21	**Test Group OBD Compliance Level**	Enter the applicable OBD Compliance Level for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/OnBoard DiagnosticDevic eDetails	ComplianceLevelI dentifier	TRUE	Once per test group.	A(4)	Enumeratio n								F = Full - no deficiencies PD = Partial - with deficiencies PDP = Partial - with deficiencies and penalty PSD = Partial - some models w/o deficiencies and some w/ deficiencies PSDP = Partial - some models w/o deficiencies and some w/ deficiencies and penalty	Light Duty	Certification		Manufact urer	Front End	XML		
TG-22	**Number of Test Group OBD Deficiencies**	Enter the number of approved OBD deficiencies for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/OnBoard DiagnosticDevic eDetails	TestGroupDeficien ciesCount	TRUE	Once per test group.	N(2)	Integer						0	99		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR020	Entry 0 is only allowed if TG-21 = F.
TG-23	**OBD Deficiencies Comments**	Provide a brief description of all approved deficiencies for this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details/OnBoard DiagnosticDevic eDetails	ManufacturerCom mentText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML		
TG-24	**Reduced Fee Test Group Indicator**	Was a reduced fee payment submitted for this test group in accordance with CFR 85.2406?	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	ReducedFeeIndica tor	TRUE	Once per test group.	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification	If Y entered for TG-24 then must use reduced fee cert template for all certificates issued for this template. Data type exists	Manufact urer	Front End	XML		
TG-25	**Test Group Comments**	Enter any additional comments about this test group.	CertificationData Submission/Certi ficationInformati onDetails/TestGr oupIdentification Details	ManufacturerCom mentText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML		
	Hybrid/Combustion Engine Description (Not to be entered when Drive Source (TG-7) = 'E')					0..1																		Data set TG-26 to TG-52 is required if Hybrid Indicator (TG-7.2) equals yes, otherwise not allowed. ~~Data set TG-26 to TG-52 is not allowed if TG-7 = 'E'.~~
TG-26	**Hybrid Type**	Enter the applicable type of Hybrid system for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails	HybridTypeIdentifi er	FALSE	Once per test group.	A(2)	Enumeratio n								EM = IC Engine/Electric Motor EH = IC Engine/Hydraulic OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 Delete LD-CERT-TG-BR022 Update LD-CERT-TG-BR085 Add LD-CERT-TG-BR119 Add LD-CERT-TG-BR120	Required if Hybrid Indicator (TG-7.2) equals yes, otherwise not allowed. ~~Required for TG-7 = 'H' and not allowed for TG-7 = 'E' or 'C'.~~ Impacts TG-33
TG-27	**Hybrid Type Description if Other**	Enter a description of the hybrid system for this test group if "other" is selected for "Hybrid Type".	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails	HybridTypeOtherT ext	FALSE	Once per test group.	A(100)	String	1	100							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 Update LD-CERT-TG-BR023 Add LD-CERT-TG-BR119	Required ~~must be present~~ if Hybrid Type (TG-26) equals "Other", otherwise optional.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Content ion Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-28	**Engine type**	Enter the applicable engine type for this test group.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	EngineTypeIdentifi er	FALSE	Once per test group.	A(4)	Enumeratio n								4SI - 4-Stroke Spark Ignition 2SI - 2-Stroke Spark Ignition 4SCI - 4-Stroke Compression Ignition 2SCI - 2-Stroke Compression Ignition RT - Rotary GT - Gas Turbine RK - Rankine STIR - Stirling OT - Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 **Delete LD-CERT-TG-BR071** **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR122**	**Required if Drive Source (TG-7.1) equals "CE" (Combustion Engine) or if Hybrid Indicator (TG-7.2) equals "yes" and Hybrid Type (TG-26) equals 'EM' (IC Engine/Electric Motor) or 'EH' (IC Engine/Hydraulic), otherwise not allowed.** ~~**Required if TG-7 = 'C' or if TG-7 = 'H' and TG-26 = 'EM' or 'EH'. Optional if TG-26 = 'OT'.**~~
TG-29	**Engine Type Description**	Enter a description of the engine for this test group for gas turbine, rankine, sterling or "other" engine types.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	EngineTypeOtherT ext	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR024 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR123**	**Required if Engine Type (TG-28) equals "GT" (Gas Turbine), "RK" (Rankine), "STIR" (Stirling) or "OT" (Other), otherwise optional.**
TG-30	**Engine Block Arrangement**	Enter the applicable engine block arrangement for this test group.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	EngineBlockArrang ementIdentifier	FALSE	Once per test group.	A(2)	Enumeratio n								I = Inline V = V-shaped engine H = Horizontally Opposed W = W-shaped engine RT = Rotary OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 **Delete LD-CERT-TG-BR025a, Delete LD-CERT-TG-BR025b** **Delete LD-CERT-TG-BR026** **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR124** **Add LD-CERT-TG-BR125**	**Required if Drive Source (TG-7.1) equals "CE" (Combustion Engine) or if Hybrid Indicator (TG-7.2) equals "yes" and Hybrid Type (TG-26) equals 'EM' (IC Engine/Electric Motor) or 'EH' (IC Engine/Hydraulic), otherwise optional.** **Required if Engine Type (TG-28) equals "4SI" (4-stroke Spark Ignition), "2SI" (2-stroke Spark Ignition), "4SCI" (4-stroke Compression Ignition), "2SCI" (2-stroke Compression Ignition), and "RT" (Rotary), otherwise not allowed.** ~~**Required if TG-7 = 'C' and TG-7 = 'H' and TG-26 = 'EM' or 'EH'. Optional if TG-26 = 'OT'. Required if TG-28 = '4SI', '2SI', '4SCI', '2SCI' and 'RT'.**~~
TG-31	**Engine Block Arrangement Description if Other**	Enter a description of the engine block arrangement for this test group if "other" is selected.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	EngineBlockArrang ementOtherText	FALSE	Once per test group.	A(500)	String	1	500							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR027 **Add LD-CERT-TG-BR119**	Must be present if TG-30 = Other.
TG-32	**Number of Cylinders/Rotors**	Enter the number of cylinders or rotors for this test group.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	CylindersOrRotorsC ount	FALSE	Once per test group.	N(2)	Integer						0	20		Light Duty	Certification	Leading 0s are not required.	Manufact urer	Front End	XML	LD-CERT-TG-BR021 **Delete LD-CERT-TG-BR025a, Delete LD-CERT-TG-BR025b** **Delete LD-CERT-TG-BR026** **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR126** **Add LD-CERT-TG-BR127**	**Required if Drive Source (TG-7.1) equals "CE" (Combustion Engine) or if Hybrid Indicator (TG-7.2) equals "yes" and Hybrid Type (TG-26) equals 'EM' (IC Engine/Electric Motor) or 'EH' (IC Engine/Hydraulic), otherwise optional.** **Required if Engine Type (TG-28) equals "4SI" (4-stroke Spark Ignition), "2SI" (2-stroke Spark Ignition), "4SCI" (4-stroke Compression Ignition), "2SCI" (2-stroke Compression Ignition), and "RT" (Rotary), otherwise not allowed.** ~~**Required if TG-7 = 'C' and TG-7 = 'H' and TG-26 = 'EM' or 'EH'. Optional if TG-26 = 'OT'. Required if TG-28 = '4SI', '2SI', '4SCI', '2SCI' and 'RT'.**~~
New TG-32.5	**Camless Valvetrain Indicator**	**Do the engines in this test group use something other than a camshaft to accuate the intake and exhaust valves?**	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	CamlessValveTrai nIndicator	FALSE	**Once per test group.**	A(1)	Enumeratio n								**N = No Y = Yes**	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR163**	
New TG-32.6	**Oil ViscosityClassification**	**Enter oil Viscosity and classification recommended for use in summer (e.g.100deg F ambient temp) for engines in this test group (e.g. 0W20 GF 4, 5W20 GF3, etc)**	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails	OilViscosityClassi ficationText	FALSE	**Once per test group.**	A(25)	**String**	**1**	**25**							**Light Duty**	**Certification**		**Manufact urer**	**Front End**	XML	LD-CERT-TG-BR021 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR164**	
~~**TG-35**~~	~~**Basic fuel metering system 3**~~	~~**Enter the applicable fuel metering system type for this test group.**~~	~~**CertificationDat aSubmission/Ce rtificationInform ationDetails/Hyb ridCombustionE ngineDescriptio nDetails**~~	~~**PrimaryFuelMeteri ngSystemIdentifier**~~	~~**FALSE**~~	~~**Once per test group.**~~	~~**A(4)**~~	~~**Enumeratio n**~~								~~**MFI = Multipoint/sequential fuel injection CMIX = CNG mixer unit DDI = Gasoline Direct fuel injection LMIX = LNG Mixer CRDI = Common Rail Diesel Injection GFI = Gaseous Fuel Injection IDI = Direct Diesel Injection IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)**~~	~~**Light Duty**~~	~~**Certification**~~		~~**Manufact urer**~~	~~**Front End**~~	~~**XML**~~	**Delete LD-CERT-TG-BR025a, Delete LD-CERT-TG-BR025b**	~~**Required if TG-7 = 'C' or if TG-7 = 'H' and TG-26 = 'EM' or 'EH'. Optional if TG-26 = 'O'.**~~
~~**TG-36**~~	~~**Basic fuel metering system 3 - Secondary Fuel**~~	~~**Enter the applicable second fuel metering system type for this test group.**~~	~~**CertificationDat aSubmission/Ce rtificationInform ationDetails/Hyb ridCombustionE ngineDescriptio nDetails**~~	~~**SecondaryFuelMet eringSystemIdentifier**~~	~~**FALSE**~~	~~**Once per test group.**~~	~~**A(4)**~~	~~**Enumeratio n**~~								~~**MFI = Multipoint/sequential fuel injection CMIX = CNG mixer unit DDI = Gasoline Direct fuel injection LMIX = LNG Mixer CRDI = Common Rail Diesel Injection GFI = Gaseous Fuel Injection IDI = Direct Diesel Injection IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)**~~	~~**Light Duty**~~	~~**Certification**~~		~~**Manufact urer**~~	~~**Front End**~~	~~**XML**~~	**Delete LD-CERT-TG-BR028** **Delete LD-CERT-TG-BR029**	~~**Required if TG-8 = 'DF' or 'BF', not allowed if TG-8 = 'FF', otherwise optional.**~~
	Engine Configuration Information		**HybridCombusti onEngineDescri ption**			**1..n**																		
TG-36	**Engine Configuration Number**	Assigned by Verify for each engine configuration created by the manufacturer.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	EngineConfigurati onNumber	FALSE	Repeats for each engine configuration (TG-36).	N(2)	Integer						1	99		Light Duty	Certification		Verify	Front End	XML	LD-CERT-TG-BR021 **Update LD-CERT-TG-BR085** LD-CERT-TG-BR087 **Add LD-CERT-TG-BR119**	Assigned by VERIFY as a sequential incrementer for each data set entered by the user. Data elements TG-36 to TG-52 make this repeating data set. This rule (Rule A) applies generically to the "main" data elements in this repeating data set, TG-36 to TG-52. Rule A: Required if TG-28 = '4SI', '2SI', '4SCI', '2SCI' or RT, otherwise optional.
TG-37	**Engine Rated Horsepower**	Enter the rated horsepower for this engine configuration. (In horsepower)	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	EngineRatedHorse powerValue	FALSE	Repeats for each engine configuration (TG-36).	N(4)	Integer						1	9,999		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR030 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR165a** **Add LD-CERT-TG-BR165b**	Rule A (above) applies.
TG-38	**Engine Displacement (Liters)**	Enter the engine displacement for this engine configuration. (In Liters)	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	EngineDisplaceme ntValue	FALSE	Repeats for each engine configuration (TG-36).	N(5,3)	Decimal				5	3	0.001	99.999		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR030 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule A applies.
TG-39	**Cylinder Deactivation**	Does this engine configuration utilize cylinder deactivation technologies? This is sometimes referred to as variable displacement.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	CylinderDeactivati onIndicator	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR031 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule B: Required if TG-28 = '4SI', '2SI', '4SCI', or '2SCI', otherwise optional.
TG-40	**Cylinder Deactivation Description**	Enter a description of the cylinder deactivation technology utilized on this engine configuration.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	CylinderDeactivati onDescriptionText	FALSE	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR032 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Required if TG-39 = Y

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-41	**Variable Valve Timing**	Does this engine configuration utilize variable valve timing technology?	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	VariableValveTimingIndicator	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR031 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule B applies.
TG-42	**Variable Valve Timing System Description**	Enter a description of the variable valve timing technology utilized on this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	VariableValveTimingDescriptionText	FALSE	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR033 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Required if TG-41 = Y
TG-43	**Variable Valve Lift?**	Is this engine configuration equipped with a variable valve lift mechanism?	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	VariableValveLiftIndicator	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR031 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule B applies.
TG-44	**Variable Valve Lift System Description**	Enter a description of the variable valve lift mechanism utilized on this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	VariableValveLiftDescriptionText	FALSE	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR034 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Required if TG-43 = Y
TG-45	**Number of Inlet Valves Per Cylinder**	Enter the number of inlet valves per cylinder for this engine configuration. Enter 0 if not applicable.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	InletValvesPerCylinderCount	FALSE	Repeats for each engine configuration (TG-36).	N(1)	Integer						0	9		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR031 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule B applies.
TG-46	**Number of exhaust Valves Per Cylinder**	Enter the number of exhaust valves per cylinder for this engine configuration. Enter 0 if not applicable.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	ExhaustValvesPerCylinderCount	FALSE	Repeats for each engine configuration (TG-36).	N(1)	Integer						0	9		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR031 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule B applies.
TG-47	**Air Aspiration Method**	Enter the applicable air aspiration methods for this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	AirAspirationMethodIdentifier	FALSE	Repeats for each engine configuration (TG-36).	A(2)	Enumeration								NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR030 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule A applies.
TG-48	**Number of Air Aspiration Devices**	Enter the number of air aspiration devices for this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	AirAspirationDeviceCount	FALSE	Repeats for each engine configuration (TG-36).	N(2)	Integer						0	99		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR073 LD-CERT-TG-BR075 LD-CERT-TG-BR076 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR179**	Rule A applies. Required if Air Aspiration Method (TG-47) <> 'NA'.
TG-49	**Air Aspiration Device Configuration**	Enter the air aspiration device configuration for this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	AirAspirationConfigurationIdentifier	FALSE	Repeats for each engine configuration (TG-36).	A(2)	Enumeration								N = Single P = Parallel S = Series PS = Both (Parallel and Series)	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR074 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119** **Add LD-CERT-TG-BR178** **Add LD-CERT-TG-BR179**	Rule A applies.
TG-50	**Air Aspiration Method if Other**	Enter a description of the air aspiration method for this engine configuration if "other" is selected.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	AirAspirationMethodOtherText	FALSE	Repeats for each engine configuration (TG-36).	A(30)	String	1	30							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR035 LD-CERT-TG-BR072 **Add LD-CERT-TG-BR119**	Must be present if TG-47 = Other.
TG-51	**Charge Air Cooler Type**	Enter the applicable charge air cooler type for this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	ChargeAirCoolerIdentifier	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeration								A = Air L = Liquid N = N/A	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR083 **Update LD-CERT-TG-BR085** **Add LD-CERT-TG-BR119**	Rule A applies.
TG-52	**Engine Configuration Comments**	Enter any additional comments about this engine configuration.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	ManufacturerCommentText	FALSE	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR021 LD-CERT-TG-BR087 **Add LD-CERT-TG-BR119**	
	Exhaust Emission Control System																**Light Duty**	**Certification**						**Data set is not allowed if TG-7 = 'E'. Here to end is assumed.**
	After Treatment Device Section		**ExhaustEmissionControlSystem**														**Light Duty**	**Certification**						
TG-53	**Total Number Of After Treatment Devices (ATDs)**	Enter the total number of after treatment devices for this test group.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails	AftertreatmentDeviceCount	FALSE	Once per test group.	N(2)	Integer						0	99		Light Duty	Certification		Manufacturer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR128** **Add LD-CERT-TG-BR181**	**Required if Drive Source (TG-7.1) equals "CE" (Combustion Engine) or if Hybrid Indicator (TG-7.2) equals "yes" and Hybrid Type (TG-26) equals 'EM' (IC Engine/Electric Motor) or 'EH' (IC Engine/Hydraulic), otherwise not allowed.** ~~Required if TG-7 = 'C' or if (TG-7 = 'H' AND TG-26* = 'EM' or 'EH').~~
TG-54	**ATD Comments**	Enter a description of the after treatment devices for this test group.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails/EmissionsControlSystemDetails/AftertreatmentDevicesDetails	ManufacturerCommentText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	Required if TG-7 = 'C' or if (TG-7 = 'H' AND TG-26* = 'EM' or 'EH'). **(Delete this business rule? Or was this rule already deleted?)**
TG-55	**ATD Number**	A number assigned by Verify to each after treatment device.	n/a	AftertreatmentDeviceNumber	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	N(2)	Integer						1	99		Light Duty	Certification		Verify	Front End	generated	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR166**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND TG-26* = 'EM' or 'EH').
TG-56	**ATD Type**	Enter the type of after treatment device for this ATD number.	CertificationDataSubmissionCertificationInformationDetailsHybridCombustionEngineDescriptionDetailsEngineConfigurationDetails/EmissionsControlSystemDetails/AftertreatmentDevicesDetails/AftertreatmentDeviceDetails	AftertreatmentDeviceTypeIdentifier	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(6)	Enumeration								TWC = Three-way catalyst OC = Oxidation catalyst HCAD = HC-Adsorber TWC+OC = Three-way catalyst plus oxidation catalyst DPF = Diesel Particulate Filter SCR = Selective Catalytic Reduction NOXAD = NOx Adsorber OT = Other	Light Duty	Certification		Manufacturer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR166**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND TG-26* = 'EM' or 'EH').

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-57	**ATD Precious Metal Type**	Enter the applicable type(s) of precious metal(s) for this ATD	CertificationData Submission/Certi fication Informati onDetails/Exhau stEmissionsContr olSystemDetails/ AftertreatmentDe vicesDetails/After treatmentDevice Details	PreciousMetalType Identifier	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(2)	Enumeratio n								PT = Platinum PL = Paladium RH = Rhodium PT+PL = Platinum + Paladium PT+RH = Platinum + Rhodium PL+RH = Paladium + Rhodium PT+PL+RH = Platinum + Paladium + Rhodium OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR167**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH'). Optional if TG-56 = "DPF" or if TG-56 = "SCR"
TG-58	**ATD Precious Metal Type if Other**	Enter a description of the type of precious metal for this ATD number if "other" is selected.	CertificationData Submission/Certi fication Informati onDetails/Exhau stEmissionsContr olSystemDetails/ AftertreatmentDe vicesDetails/After treatmentDevice Details	PreciousMetalOthe rText	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(50)	String	1	50							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c LD-CERT-TG-BR037d	Must be present if TG-57 = Other .
TG-59	**Substrate Material**	Enter the applicable material of the substrate for this ATD number.	CertificationData Submission/Certi fication Informati onDetails/Exhau stEmissionsContr olSystemDetails/ AftertreatmentDe vicesDetails/After treatmentDevice Details	SubstrateMaterialI dentifier	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(1)	Enumeratio n								M=Metal C=Ceramic	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR168**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND TG-26 = 'EM' or 'EH'). Otherwise optional.
TG-60	**Substrate Construction**	Enter the applicable substrate construction for this ATD number.	CertificationData Submission/Certi fication Informati onDetails/Exhau stEmissionsContr olSystemDetails/ AftertreatmentDe vicesDetails/After treatmentDevice Details	SubstrateConstructi onIdentifier	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(1)	Enumeratio n								M=Monolith OT=Other	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR168**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH'). Otherwise optional.
TG-102	**Substrate Construction Other Description**	Enter a description of the type of precious metal for this ATD number if "other" is selected.	CertificationData Submission/Certi fication Informati onDetails/Exhau stEmissionsContr olSystemDetails/ AftertreatmentDe vicesDetails/After treatmentDevice Details	SubstrateConstructi onOtherText	FALSE	Repeats the same number of times as the Number of ATDs (TG-53).	A(50)	String	1	50							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c LD-CERT-TG-BR038	Must be present if TG-60 = Other.
	Sensor Information (Repeats for each Engine Configuration within a Test Group)		**ExhaustEmissio nControlSystem**														**Light Duty**	**Certificaton**						
TG-61	**Number of Air/Fuel Sensors**	Enter the number of air/fuel sensors for this engine configuration.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails	AirFuelSensorCoun t	FALSE	Repeats for each engine configuration (TG-36).	N(2)	Integer						0	99		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR025a Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR169** **Add LD-CERT-TG-BR170a** **Add LD-CERT-TG-BR170b**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH').
TG-62	**Air/Fuel Sensor Number**	A number assigned by Verify to each Air/Fuel sensor.	~~CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails/AirFuelSe nsorDetails~~		FALSE	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	N(2)	Integer						1	99		Light Duty	Certification		Verify	Front End	generate d	**Add LD-CERT-TG-BR169** **Add LD-CERT-TG-BR171**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH').
TG-63	**Air/Fuel Sensor Type**	Enter the applicable type of air/fuel sensor for this air/fuel sensor number.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails/AirFuelSe nsorDetails	AirFuelSensorType Identifier	FALSE	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	A(5)	Enumeratio n								O2S = Oxygen HO2S = Heated oxygen AFS = Air fuel HAFS = Heated air fuel NOX = Nitrogen oxide OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c LD-CERT-TG-BR039a LD-CERT-TG-BR039b **Add LD-CERT-TG-BR169** **Add LD-CERT-TG-BR171**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH') except ———— not required if TG-61 = "0"
TG-64	**Air/Fuel Sensor Type if Other**	Enter a description of the air/fuel sensor type if "other" selected for air/fuel sensor type	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails/AirFuelSe nsorDetails	AirFuelSensorType OtherText	FALSE	Repeats the same number of times as the Number of air/fuel sensors (TG-61).	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c LD-CERT-TG-BR040 **Add LD-CERT-TG-BR169**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH'). Must be present if TG-63 = Other.
TG-65	**Number of Knock Sensors**	Enter the number of knock sensors for this engine configuration.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails	KnockSensorCount	FALSE	Repeats for each engine configuration (TG-36).	N(2)	Integer						0	99		Light Duty	Certification		Manufact urer	Front End	XML	**Add LD-CERT-TG-BR169** **Add LD-CERT-TG-BR174a** **Add LD-CERT-TG-BR174b** **Delete LD-CERT-TG-BR025a** **Delete LD-CERT-TG-BR025b** LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH').
TG-66	**Sensor Comments**	Enter any additional description of the air/fuel sensors for this engine configuration.	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails/ AirFuelSensorD etails	ManufacturerCom mentText	FALSE	Repeats for each engine configuration (TG-36).	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c **Add LD-CERT-TG-BR169**	Required if TG-7 = 'C' or if (TG-7 = 'H' AND "TG-26" = 'EM' or 'EH'). **(Delete this rule? Or was this rule already deleted?)**
	Other Exhaust Emission Control		**ExhaustEmissio nControlSystem**														**Light Duty**	**Certificaton**	**Each of the elements in the schema group ExhaustEmissionsControlDeviceDetails (TG-67 thorugh TG-73) occurs only once per engine configuration.**					
TG-67	**Exhaust Gas Recirculation**	Does this engine configuration utilize exhaust gas recirculation device?	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	ExhaustGasRecircu lationIndicator	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification	Repeats once per engine configuration.	Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-68	**Cooled Exhaust Gas Recirculation**	Does this engine configuration utilize exhaust gas recirculation device?	CertificationData Submission/Certi fication Informati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	CooledExhaustGas RecirculationIndica tor	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-69	**EGR Type**	Enter the type of exhaust gas recirculation device for this engine configuration.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	ExhaustGasRecircu lationIdentifier	FALSE	Repeats for each engine configuration (TG-36).	A(4)	Enumeratio n								VVTC = Variable Valve Timing Control EEGR = Electronic/Electric VEGR = Vacuum OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-70	**Exhaust Gas Recirculation Description if Other**	Enter a description of the exhaust gas recirculation device for this engine configuration if "other" is selected.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	ExhaustGasRecircu lationOtherText	FALSE	Repeats for each engine configuration (TG-36).	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-71	**Closed Loop Air Injection System**	Does this engine configuration have a closed-loop air injection system?	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	ClosedLoopAirInje ctionIndicator	FALSE	Repeats for each engine configuration (TG-36).	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-72	**Air Injection Type**	Enter the applicable type of air injection system for this engine configuration.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	AirInjectionIdentifi er	FALSE	Repeats for each engine configuration (TG-36).	A(4)	Enumeratio n								AIR = Secondary Air Injection PAIR = Pulsed Secondary Air Injection NA =Not Applicable OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-73	**Air Injection if Other**	Enter a description of the air injection system for this engine configuration if "other" is selected.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid CombustionEngi neDescriptionDet ails/EngineConfi gurationDetails	AirInjectionOtherT ext	FALSE	Repeats for each engine configuration (TG-36).	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-74	**Direct Ozone Reduction (DOR) Device**	Enter the applicable type of direct ozone reduction (DOR) device for this test group. If equipped with a DOR, must obtain prior EPA approval before requesting a certificate for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsContr olSystemDetails/ OtherExhaustEm issionsControlDe viceDetails	DirectOzoneReduct ionDeviceIdentifier	FALSE	Once per test group.	A(2)	Enumeratio n								CR = Catalytic Radiator NE = Not Equipped OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-75	**DOR Device if Other**	Enter a description of the direct ozone reduction if other is selected.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsContr olSystemDetails/ OtherExhaustEm issionsControlDe viceDetails	DirectOzoneReduct ionDeviceOtherTex t	FALSE	Once per test group.	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
TG-76	**Emission Control Device Comments**	Enter any additional comments about the emission control devices for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsContr olSystemDetails/ OtherExhaustEm issionsControlDe viceDetails	ManufacturerCom mentText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR036a LD-CERT-TG-BR036b LD-CERT-TG-BR036c	
	Hybrid Electric Vehicle And Fuel Cell Information																**Light Duty**	**Certification**						**The data set TG-77 to TG-101 is Required if TG-8 = 'HV', 'EV', or 'FC', else it is not allowed.**
TG-77	**Rechargeable Energy Storage System-Device**	Enter the applicable type of energy storage device for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails	RechargeableEner gyStorageDeviceId entifier	FALSE	Once per test group.	A(2)	Enumeratio n								B = Battery(s) C = Capacitor ~~BC = Battery and Capacitor~~ ~~H = Hydraulic~~ OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR041** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR118** **Add LD-CERT-TG-BR129**	**Required if Drive Source (TG-7.1) equals 'EM' (Electric Motor) or if Hybrid Indicator (TG-7.2) equals 'yes' or if Fuel Cell Indicator (TG-7.8) equals 'yes', otherwise not allowed.** ~~Required if TG-8 = 'HV', 'EV' or 'FC'.~~
TG-78	**Rechargeable Energy Storage Device if Other**	Enter a description of the energy storage device for this test group if "other" selected.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails	RechargeableEner gyStorageDeviceOt herText	FALSE	Once per test group.	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR042 **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR130**	**Required if Rechargeable Energy Storage System (TG-77) equals 'Other', otherwise optional.** ~~Required if TG-77 = 'Other'.~~
TG-79	**Battery Type**	Enter the applicable type of battery for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryTypeIdentifi er	FALSE	Once per test group.	A(4)	Enumeratio n								LA = Lead Acid NIMH = NiMH LI = ~~Lithium Ion~~ OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR131**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~
TG-80	**Battery Type if Other**	Enter a description of the battery type for this test group if "other" selected.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryTypeOtherT ext	FALSE	Once per test group.	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR044** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR132**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)) and Battery Type (TG-79) equals 'Other', otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and TG-79 = Other, otherwise not allowed.~~
TG-81	**Number of Battery Packs (not cells)**	Enter the total number of batteries for this test group. Does not include starter batteries.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryCount	FALSE	Once per test group.	N(3)	Integer						0	999		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR133**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~
TG-82	**Total Voltage of Battery Pack(s)**	Enter the total voltage of all battery pack(s) for this test group. Does not include starter batteries. (in Volts)	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryTotalVoltag eMeasure	FALSE	Once per test group.	N(3)	Integer						1	999		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR134**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~
TG-83	**Battery Energy Capacity**	Enter the battery energy capacity for this test group. Does not include starter batteries. (in Ah)	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryEnergyCapa cityMeasure	FALSE	Once per test group.	N(4,2)	Decimal				4	2	0.01	99.99		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR135**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~
TG-84	**Battery Specific Energy**	Enter the battery specific energy for this test group. Does not include starter batteries. (in Wh/kg)	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatterySpecificEne rgyMeasure	FALSE	Once per test group.	N(5,1)	Decimal				5	1	0.1	9999.9		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR136**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~
TG-85	**Battery Charger Type**	Enter the applicable type of battery charger type for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Hybrid ElectricVehicleF uelCellDetails/B atterySpecificati onsDetails	BatteryChargerTyp eIdentifier	FALSE	Once per test group.	A(3)	Enumeratio n								ON = On-Board OFF = Off-Board B = Both	Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR043** **Add LD-CERT-TG-BR137**	**Required if Rechargeable Energy Storage System (TG-77) equals 'B' (Battery(s)), otherwise not allowed.** ~~Required if TG-77 = 'B' or 'BC' and not allowed if TG-77 <> 'B' or 'BC'.~~

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-86	**Number of Capacitors**	Enter the number of capacitors for this test group.	CertificationData Submission/Certi fication DataDeta il/aHybridElectric VehicleFuelCell Details/aCapacitor SpecificationDe tails	CapacitorCount	FALSE	Once per test group.	N(3)	Integer						0	99		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR045** **Add LD-CERT-TG-BR138**	Required if Rechargeable Energy Storage System (TG-77) equals 'C' (Capacitor), otherwise not allowed. ~~Required if TG-77 = 'C' and not allowed if TG-77 <> 'C'.~~
TG-87	**Capacitor Rating In Farads**	Enter the rating of each capacitor number (in farads).	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aC apacitorSpecific ationsDetails	CapacitorRatingVa lue	FALSE	1..n (Repeats for the total number of capacitors)	N(4,2)	Decimal				4	2	0.01	99.99		Light Duty	Certification	Repeats once per each TG-86.	Manufact urer	Front End	XML	LD-CERT-TG-BR046 **Add LD-CERT-TG-BR139**	Required if Rechargeable Energy Storage System (TG-77) equals 'C' (Capacitor), otherwise not allowed. ~~Required if TG-77 = 'C' and not allowed if TG-77 <> 'C'.~~
TG-88	**Capacitor Comments**	Enter any additional comments about the capacitor(s) for this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aC apacitorSpecific ationsDetails	CapacitorComment Text	FALSE	Once per test group.	A(100)	String	1	100							Light Duty	Certification		Manufact urer	Front End	XML		
TG-89	**Hydraulic System Description**	Enter a description of the hydraulic system for this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails	HydraulicSystemDe scriptionText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	**Add LD-CERT-TG-BR177** **Delete LD-CERT-TG-BR047** **Update LD-CERT-TG-BR086**	~~Required if TG-77 = 'H'.~~
TG-90	**Regenerative Braking Type**	Enter the applicable type of regenerative braking technology utilized on this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aR egenerativeBrak ingDetails	BrakingTypeIdentIf ier	FALSE	Once per test group.	A(3)	Enumeratio n								NA = Not applicable (default) ERE = Electrical Regen Brake HRE = Hydraulic Regen Brake OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	**Update LD-CERT-TG-BR086**	
TG-91	**Regenerative Braking Type if "Other"**	Enter a description of the type of regenerative braking technology utilized on this test group if "other" is selected.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aR egenerativeBrak ingDetails	BrakingTypeOther Text	FALSE	Once per test group.	A(1000)	String									Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR048 **Update LD-CERT-TG-BR086**	Required if TG-90 = Other.
TG-92	**Regenerative Braking Source**	Enter the applicable source of regenerative braking for this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aR egenerativeBrak ingDetails	BrakingSourceIden tifier	FALSE	Once per test group.	A(1)	Enumeratio n								F = Front Wheels R = Rear Wheels B = Both	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR049 **Update LD-CERT-TG-BR086**	Required if TG-90 <> NA and not allowed if TG-90 = NA.
TG-93	**Driver Controlled Regenerative Braking**	Does this test group have driver-controlled regenerative braking?	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aR egenerativeBrak ingDetails	DriverControlledBr akingIndicator	FALSE	Once per test group.	A(1)	Enumeratio n								N = No Y = Yes	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR049 **Update LD-CERT-TG-BR086**	Required if TG-90 <> NA and not allowed if TG-90 = NA.
TG-94	**Number of Drive Motor/Generator(s)**	Enter the number of drive motor/generator(s) for this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aDr iveMotorGenerat orDetails	MotorGeneratorCo unt	FALSE	Once per test group.	N(1)	Integer						0	9		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR050 **Update LD-CERT-TG-BR086**	Required if TG-26 <> 'EH' and not allowed if TG-26 = 'EH'.
TG-95	**Motor/Generator Type**	Enter the applicable type of motor/generator for this motor/generator.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aDr iveMotorGenerat orDetails/aMotorG eneratorDetails	GeneratorTypeIde ntifier	FALSE	1..n (Repeats for the total number of drive motor/generators)	A(4)	Enumeratio n								ACI = AC Induction DCB = DC Brushless DCPM = DC Permanent Magnet, brushless SR = Switched Reluctance OT = Other	Light Duty	Certification	TG-95- TG-97 comprise a repeating group per each TG-94.	Manufact urer	Front End	XML	LD-CERT-TG-BR052 **Update LD-CERT-TG-BR086**	Required if TG-94 > 0 and not allowed if TG-94 = 0.
TG-96	**Motor/Generator Type if Other**	Enter a description of the type of motor/generator for this motor/generator if other is selected.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aDr iveMotorGenerat orDetails/aMotorG eneratorDetails	GeneratorTypeOth erText	FALSE	1..n (Repeats for the total number of drive motor/generators)	A(30)	String	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR051 **Update LD-CERT-TG-BR086**	Required if TG-95 = Other.
TG-97	**Rated Motor/Generator Power**	Enter the rated power of the motor/generator for this motor/generator. (in Watt)	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aDr iveMotorGenerat orDetails/aMotorG eneratorDetails	GeneratorRatedPo werValue	FALSE	1..n (Repeats for the total number of drive motor/generators)	N(3)	Integer						1	999		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR052 **Update LD-CERT-TG-BR086**	Required if TG-94 > 0 and not allowed if TG-94 = 0.
TG-98	**Fuel Cell Description**	Enter a description of the fuel cell for this test group.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails	FuelCellDescriptio nText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR053** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR140**	**Required if Fuel Cell Indicator (TG-7.8) equals 'yes', otherwise not allowed.** ~~Required if TG-8 = 'FC'.~~
TG-99	**Fuel Cell On-Board H2 Storage Capacity**	Enter the on-board hydrogen storage capacity for this test group. (in kg)	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails	FuelCellOnboardH ydrogenStorageMe asure	FALSE	Once per test group.	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	Certification		Manufact urer	Front End	XML	**Delete LD-CERT-TG-BR054** **Update LD-CERT-TG-BR086** **Add LD-CERT-TG-BR141**	**Required if Fuel Cell Indicator (TG-7.8) equals 'yes' and Fuels (TG-7.3) equals 'H' (Hydrogen), otherwise not allowed.** ~~Required if TG-8 = 'FC' and TG-17 = 'H'.~~
TG-100	**Usable H2 Fill Capacity**	Enter the usable hydrogen fill capacity for this test group. (in kg)	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails	UsableHydrogenFil lCapacityMeasure	FALSE	Once per test group.	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR055 **Update LD-CERT-TG-BR086**	Required if TG-99 present otherwise not allowed.
TG-101	**HEV EV Comments**	Enter any additional comments for this electric vehicle or hybrid-electric vehicle.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails	ManufacturerCom mentText	FALSE	Once per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML	**Update LD-CERT-TG-BR086**	
Exhaust Emissions Standards and Cert Levels entered for each Certification Region																	**Light Duty**							
TG-200	**Certification Region Code**	Select the applicable certification region codes for this exhaust standard.	CertificationData Submission/Certi fication Informati onDetails/aHybrid ElectricVehicleF uelCellDetails/aEmissionsStan dardDetails	CertificationRegion Code	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeratio n								CA = California + CAA Section 177 states FA = Federal	Light Duty	Certification	Same as element TG-305 if Both is excluded.	Manufact urer	Front End	XML		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-200.5	**CertificationIn-Use Code**	Select the applicable certification/in-use code for this exhaust standard.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	CertificationInUseC ode	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeratio n								C = Certification IU = In-Use B = Both	Light Duty	Certification		Manufact urer	Front End	XML	**Update LD-CERT-TG-BR064b Update LD-CERT-TG-BR064c Update LD-CERT-TG-BR065b Update LD-CERT-TG-BR066**	
TG-205	**Vehicle Class**	Select the applicable vehicle class for this exhaust standard.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	VehicleClassIdentifi er	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(2)	Enumeratio n								For Federal or California Certification Region Codes: LDV - LDV/Passenger Car LDT1 - LDT1 (LVW-3750, GVW 0-6000), LDT2 - LDT2 (LVW 3751-5750, GVW 0-6000), LDVT - LDV and LDT1 For Federal Certification Region Code: LDT3 - LDT3 (ALVW 3751-5750, LVW 0-3750, GVW > 6000), LDT4 - LDT4 (ALVW > 5750, LVW 0-3750, GVW > 6000), MDPV - MDPV (Federal Tier 2, GVWR 8501-10000), HDV1 - HDV1 (Federal HD chassis GVW 8501-10000), HDV2 - HDV2 (Federal HD chassis GVW 10001-14000) For California Certification Region Code: M6 - MDV6 (Cal. LEV 2 MDV GVW 8501-10000), M7 - MDV7 (Cal. LEV 2 MDV GVW 10001-14000)	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR016	
TG-201	**Exhaust Emission Standard Level**	Select the applicable standard level for this exhaust standard..	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	ExhaustEmissionsS tandardLevelIdenti fier	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(5)	Enumeratio n			((0-9){1,3}\.){0-9}{1,4}|((\.){0-9}{1,4}){0-9}{1,3}\.?)					B1 = Federal Tier 2 Bin 1 B2 = Federal Tier 2 Bin 2 B3 = Federal Tier 2 Bin 3 B4 = Federal Tier 2 Bin 4 B5 = Federal Tier 2 Bin 5 B6 = Federal Tier 2 Bin 6 B7 = Federal Tier 2 Bin 7 B8 = Federal Tier 2 Bin 8 B9 = Federal Tier 2 Bin 9 B10 = Federal Tier 2 Bin 10 B11 = Federal Tier 2 Bin 11 HDV1 = Federal HDV (8,500 - 10,000 lbs GVWR) HDV2 = Federal HDV (10,001 - 14,000 lbs GVWR) L2 = CARB LEV2 LEV L2OP = CARB LEV2 LEV Optional U2 = CARB LEV2 ULEV S2 = CARB LEV2 SULEV ZEV = CARB ZEV OT = Other	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR081a LD-CERT-TG-BR081b LD-CERT-TG-BR102	
TG-204	**Fuel**	Select the applicable fuel for this exhaust standard.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	FuelIdentifier	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(3)	Enumeratio n								**G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen** ~~BE - Battery Electric~~ **EL - Electricity** ~~NA - Not applicable~~	Light Duty	Certification	Multi-fueled vehicles will have at least one test # for each fuel type/test category combination.	Manufact urer	Front End	XML	**Add LD-CERT-TG-IB002c**	
TG-204.5	**Test Procedure**	Enter the applicable test procedure for the applicable exhaust emission standard.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	TestProcedureIden tifier	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(2)	Enumeratio n								1 = CVS 75 AND LATER (MID-CAN. LOAD) 2 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SHFTBACK TEST 21 = FED FUEL 2 DAY EVAP (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (DRVR) (BUTANE) 25 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EVAP (BUTANE LOAD) 32 = FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP (BUTANE LOAD) 35 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EVAP(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (DRVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EVAP (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST ~~53 = EXACTEC VEHICLE DRIVING ENGINE TEST~~ ~~54 = EXACTEC VEHICLE DRIVING ENGINE TEST~~ 72 = CST TWO SPEED IDLE TEST 79 = CST PREID 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 82 = Charge Depleting US06 83 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test-Manual A/C 88 = A/C Idle Test- Automatic A/C 89 = US06 90 = SC03	Light Duty	Certification		Manufact urer	Front end	XML	**Delete LD-CERT-TG-BR093**	
TG-210	**Useful Life Mileage**	Select the applicable useful life mileage for this exhaust standard.	CertificationData Submission/Certi ficationInformati onDetails/Exhau stEmissionsStan dardDetails	UsefulLifeMileagel dentifier	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	N(3)	Enumeratio n								4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light Duty	Certification		Manufact urer	Front End	XML	**Update LD-CERT-TG-BR064b, Update LD-CERT-TG-BR064c Update LD-CERT-TG-BR065b Update LD-CERT-TG-BR066**	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-209	**Test Result/Emission Name**	Select the applicable test result name for this exhaust standard.	CertificationData Submission/Certi ficationInformati onDetail/EPAG eneratedCertific ationDetails	TestResultIdentifier	TRUE	Test Group + Certification Region Code + Certification/InUse Code + Vehicle Class + Exhaust Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of exhaust standard/DF info. 1..n	A(16)	Enumeratio n								HC-TOTAL (Total Hydrocarbon) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PMCOMP (SFTP Composite Particulate Matter) NMHC (Non-methane Hydrocarbon) NMOG (Organic material non-methane Hydrocarbon equivalent) GMHHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (Carbonyl)) ECHO (Formaldehyde) KECHO (Acetaldehyde) KCNMHCNOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for LEV-III or TC2S) KCNMHCNOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) COCOMP (SFTP Composite Carbon Monoxide) ETHANOL (CH4O2= Ethanol) FE BAS-1 (Reg.1 Fuel Economy) FE BAS-2 (Reg.2 Fuel Economy) FE BAS-3 (Reg.3 Fuel Economy) FE BAS-4 (Reg.4 Fuel Economy) MPR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and DBVR) METHANE (CH4) (Methane) METHANOL (CH4O4) (Methanol) N2O (Nitrous Oxide) SPITBACK (Spitback Hydrocarbon in grams) Allowed for Charge Depleting Test Procedures Only: AMP-HRS - Integrated Amp-hours START-SOC - System Start State of Charge Watt-hours END-SOC - System End State of Charge Watt-hours ACT-DISTANCE - Actual Distance Driven (miles) AS-VOLT - Average System Voltage	Light Duty	Certification	**CREE and Opt-CREE are not valid values here. Need to add a business rule that doesn't allow CREE or Opt-CREE to be selected here as a standard or DF.**	Manufact urer	Front End	XML	**Add LD-CERT-TG-BR176 Update LD-CERT-TG-BR064a Update LD-CERT-TG-BR065a** LD-CERT-TG-BR097 LD-CERT-TG-BR099	**'NEW': The following values for Useful Life Mileage (TG-209) are not valid: 'CREE' (Carbon-Related Exhaust Emissions), 'Opt-CREE' (Optional Carbon-Related Exhaust Emissions), 'AMP-HRS' (Integrated Amp-hours), 'START-SOC' (System Start State of Charge Watt-hours), 'END-SOC' (System End State of Charge Watt-hours), 'ACT-DISTANCE' (Actual Distance Driven (miles)), or 'AS-VOLT' (Average System Voltage).**
TG-211	**Emission Standard Value**	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Emission Standard Value (Text)" (TG-212).	CertificationData Submission/Certi ficationInformati onDetail/EPAG eneratedCertific ationDetails	EmissionStandard Value	TRUE	1..1 for each unique set of exhaust standard/DF info.	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	Certification		Verify	Backen d	Assigned		
TG-212	**Emission Standard Value (Text)**	Enter the applicable numeric value for this exhaust standard name including any additional digits that are necessary for proper rounding.	CertificationData Submission/Certi ficationInformati onDetail/EPAG eneratedCertific ationDetails	ExhaustEmissionS tandardValueText	TRUE	1..1 for each unique set of exhaust standard/DF info.	A(8)	Numeric string									Light Duty	Certification		Manufact urer	Front End	XML		
TG-208	**Exhaust Deterioration Factor Type**	Select the applicable deterioration factor type for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	DeteriorationFactor TypeIdentifier	TRUE	1..1 for each unique set of exhaust standard/DF info.	A(4)	Enumeratio n								MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed in the emission data vehicle	Light Duty	Certification		Manufact urer	Front End	XML		
TG-206	**Using NMOG/NMHC Ratio?**	If this is an NMOG standard, is the NMOG/NMHC ratio being used?	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	NMOGToNMHCRat ioIndicator	FALSE	1..1 for each unique set of exhaust standard/DF info.	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML		
TG-207	**Ratio of NMOG/NMHC**	If applicable, enter the value for the NMOG/NMHC ratio for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	NMOGToNMHCRat ioValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(3,2)	Decimal				3	2	0.00	9.99		Light Duty	Certification		Manufact urer	Front End	XML		
TG-214	**Additive DF**	If applicable, enter the additive deterioration factor (DF) value for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails.	AdditiveDeteriorati onFactorValue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	0	9.999999		Light Duty	Certification		Manufact urer	Front End	XML		
TG-215	**Multiplicative DF**	If applicable, enter the multiplicative deterioration factor (DF) value for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	MultiplicativeDeter iorationFactorValu e	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(4,3)	Decimal				4	3	1	9.999		Light Duty	Certification		Manufact urer	Front End	XML		
TG-215.5	**Upward Diesel Adjustment Factor**	If applicable, enter the upward diesel adjustment factor value for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	UpwardDieselAdjus tmentFactor	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR077	Required if Fuel (TG-204)= 'D' (diesel), otherwise optional.
TG-215.6	**Downward Diesel Adjustment Factor**	If applicable, enter the downward diesel adjustment factor value for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	DownwardDieselAd justmentFactor	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(7,6)	Decimal				7	6	-9.999999	9.999999		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR078	Required if Fuel (TG-204)= 'D' (diesel), otherwise optional.
TG-216	**Reactivity Factor (RAF)**	If applicable, enter the reactivity factor for this exhaust standard name.	CertificationData Submission/Certi ficationInformati onDetail/EExhau stEmissionsStan dardDetails	ReactivityFactorVal ue	FALSE	1..1 for each unique set of exhaust standard/DF info.	N(5)	Integer						0	99.999		Light Duty	Certification	use for NMOG, Methane. Note: for Tier 2 (Bin 1-11) emissions it will be defaulted to 1.0 for NMOG and 0.0 for Methane	Manufact urer	Front End	XML		
TG-220	**Exhaust/Evaporative Emission Standard Comments**	Enter any additional comments for the exhaust or evaporative standards for this test group.	CertificationData Submission/Certi ficationInformati onDetails	EmissionStandard CommentText	FALSE	1 per test group.	A(1000)	String	1	1000							Light Duty	Certification		Manufact urer	Front End	XML		
Evaporative and Refueling Emission Standards and Cert Level is Entered For Each Certified Region Code																								
TG-3	**Evaporative/Refueling Family Name**	Enter all applicable evaporative/refueli ng family names for this test group.	CertificationData Submission/Certi ficationInformati onDetail/ECertific ationEvaporative InformationDetails	EvaporativeRefueli ngFamilyName	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(12)	String	12	12	[A-H1-NP8-TV-Y1-9][1][A-Z0-9][4][0-9][4][A-Z0-9][8]						Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR084 LD-CERT-TG-BR090 LD-CERT-TG-BR104	Evap Family model year must be current year through current year + 2.
TG-221	**Certification Region Code**	Select the applicable certification region codes for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetail/ECertific ationEvaporative InformationDetails/EEvaporativeE missionsStandar dDetails	CertificationRegion Code	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(2)	Enumeratio n								CA = California + CAA Section 177 states FA = Federal	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR095a LD-CERT-TG-BR095b	
TG-221.5	**Certification/In-Use Code**	Select the applicable certification/in-use code for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetail/ECertific ationEvaporative InformationDetails/EEvaporativeE missionsStandar dDetails	CertificationInUseC ode	FALSE	Test Group + Evap Family + Evap Certification Region Code + Certification/InUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info. 0..n	A(2)	Enumeratio n								C = Certification IU = In-Use B = Both	Light Duty	Certification		Manufact urer	Front End	XML		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-224	**Evaporative/Refueling Standard Level**	Select the applicable standard level for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	EvaporativeEmissi onsStandardLevelI dentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + CertificationIntUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	A(4)	Enumeratio n								T1 - Federal Tier 1 Evap T2 - Federal Tier 2 Evap F2 - Federal Lev-II Evap C2 - CA LEV-II Evap ZZ - CA LEV-II Zero Evap HD-2D = Federal Heavy-Duty 2-Day Evap (1.75 grams) HD-3D = Federal Heavy-Duty 3-Day Evap (1.4 grams) OT = Other	Light Duty	Certification	T1 previously called ENHA in CFEIS	Manufact urer	Front End	XML		
TG-223	**Fuel**	Select the applicable fuel for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	FuelIdentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + CertificationIntUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	A(3)	Enumeratio n								**G - Gasoline** **D - Diesel** **M - Methanol** **E - Ethanol** **CNG - Compressed Natural Gas** **LNG - Liquified Natural Gas** **LPG - Liquid Petroleum Gas** **H - Hydrogen** ~~**BE - Battery Electric**~~ **EL - Electricity** ~~**NA - Not applicable**~~	Light Duty	Certification		Manufact urer	Front End	XML	**Add LD-CERT-TG-IB002d**	
TG-223.5	**Test Procedure**	Enter the applicable test procedure for this evaporative emission standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	TestProcedureIden tifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + CertificationIntUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	N(2)	Enumeratio n								1 = CVS 75 AND LATER (W/O CAN. LOAD) 2 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = CCSE CO 13 = SPIT BACK TEST 21 = FED FUEL 2 DAY EVAP (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (DRVR) (BUTANE) 25 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUT ANE LOAD) 31 = FED FUEL 3 DAY EVAP (BUT ANE LOAD) 32 = FED FUEL RUNNING LOSS 33 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EVAP (BUT ANE LOAD) 37 = CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUT ANE LOAD) 41 = FED FUEL 2 DAY EVAP(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (DRVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EVA (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEGF) EXHAUST TEST 52 = FED FUEL 50 DEGF)EXHAUST TEST ~~53 = FUEL PROVISIONAL 3 DAY EVAP TEST~~ ~~54 = ELECTRICITY/FUEL 3 DAY EVAP TEST~~ 72 = CCST TWO SPEED IDLE TEST 73 = CST FREQ 2 SPD IDLE (EPA ONLY) 91 = Charge Depleting UDDS 93 = Charge Depleting US06 95 = Charge Depleting Highway 96 = Charge Depleting SC03 98 = Charge Depleting 20 Degree F FTP 97 = A/C Idle Test- Manual A/C 99 = A/C Idle Test- Automatic A/C 80 = US06 81 = SC03	Light-Duty	Certification		Manufact urer	Front end	XML	**Delete LD-CERT-TG-BR094**	
TG-223.6	**Useful Life Mileage**	Select the applicable useful life mileage for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	UsefulLifeMileagel dentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + CertificationIntUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	N(3)	Enumeratio n								4 = 4,000 miles 50 = 50,000 miles 100 = 100,000 miles 120 = 120,000 miles 150 = 150,000 miles	Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR095c	
TG-225	**Test Result/Emission Name**	Select the applicable emission name for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	TestResultIdentifier	FALSE	Test Group + Evap Family + Evap Certification Region Code + CertificationIntUse Code + Evap Emission Standard Level + Fuel + Test Procedure + Useful Life + Emission Name identifies a unique set of evap standard/DF info.	A(16)	Enumeratio n								HC-TOTAL (Total Hydrocarbon) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) DPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PMCOMP (SFTP Composite Particulate Matter) HC-NMO(Non-methane Hydrocarbon) SMHCE (Organic material Hydrocarbon equivalent) SMMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) ECHO (Formaldehyde) AECHO (Acetaldehyde) NOXNMOG (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HCNMHNOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) COCOMP (SFTP Composite Carbon Monoxide) ETHANOL (C2H6O= Ethanol) FE BAG-1 (Bag 1 Fuel Economy) FE BAG-2 (Bag 2 Fuel Economy) FE BAG-3 (Bag 3 Fuel Economy) FE BAG-4 (Bag 4 Fuel Economy) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and DRVR) METHANE (CH4) (Methane) METHANOL (CH3OH) (Methanol) H2O (Water Vapor) SPITBACK (Spitback Hydrocarbon in grams) ~~Created For Charge Depleting Test Procedures Only~~ ~~CWF-HRS- Integrated Amp-hours~~ START-SOC- System Start State of Charge Watt-hours END-SOC- System End State of Charge Watt-hours ACT-DISTANCE- Actual Distance Driven (miles) AS-VOLT - Average System Voltage	Light Duty	Certification	**CREE and Opt-CREE are not valid values here. Need to add a business rule that doesn't allow CREE or Opt-CREE to be selected here as a standard or DF.**	Manufact urer	Front End	XML	**Add LD-CERT-TG-BR161** LD-CERT-TG-BR082 LD-CERT-TG-BR095a LD-CERT-TG-BR095b LD-CERT-TG-BR095c LD-CERT-TG-BR098 LD-CERT-TG-BR100 **Delete LD-CERT-TG-BR142**	**"NEW"** **The following values for Test Result/Emission Name (TG-225) are not valid: 'CREE' (Carbon-Related Exhaust Emissions), 'Opt-CREE' (Optional Carbon-Related Exhaust Emissions), 'AMP-HRS' (Integrated Amp-hours), 'START-SOC' (System Start State of Charge Watt-hours), 'END-SOC' (System End State of Charge Watt-hours), 'ACT-DISTANCE' (Actual Distance Driven (miles)), or 'AS-VOLT' (Average System Voltage).**
TG-226	**Evaporative Emission Standard Value**	This is a system-generated numeric field based on converting the text value entered by the manufacturer for "Evaporative Emission Standard Value (Text)" (TG-226.5).	CertificationData Submission/Certi ficationInformati onDetails/EPAG eneratedCertific ationDetails	EvaporativeEmissi onsStandardValue	FALSE	1..1 for each unique set of evap standard/DF info.	N(7,4)	Decimal			[0-9]{1,3}\.[0-9]{1,4}|[0-9]{1,3}\.[0-9]{1,4}|[0-9]{1,3}\.\??	7	4	0.0000	999.9999		Light Duty	Certification	Note: The system shall support the entry of emission standards by the user and may additionally provide default values if EPA has applicable standards. Insert emission standard numerical value	Verify	Back End	Assigned		
TG-226.5	**Evaporative Emission Standard Value (Text)**	Enter the applicable numeric value for this evaporative standard name including any additional digits that are necessary for proper rounding.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	EvaporativeEmissi onsStandardValue Text	FALSE	1..1 for each unique set of evap standard/DF info.	A(8)	String									Light Duty	Certification		Manufact urer	Front End	XML		
TG-222	**Evaporative Deterioration Factor Type**	Select the applicable deterioration factor type for this evaporative standard.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	DeteriorationFactor TypeIdentifier	FALSE	1..1 for each unique set of evap standard/DF info.	A(4)	Enumeratio n								MFRA = Mfr. Assigned EPAA = EPA Assigned MFRD = Mfr. Determined AGED = Aged components installed in the emission data vehicle	Light Duty	Certification		Manufact urer	Front End	XML		
TG-227	**Additive DF**	Enter the additive deterioration factor (DF) value for this evaporative standard name.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai lsEvaporativeE missionsStandar dDetails	AdditiveDeteriorati onFactorValue	FALSE	1..1 for each unique set of evap standard/DF info.	N(7,6)	Decimal				7	6	0	9.999999		Light Duty	Certification		Manufact urer	Front End	XML		
	All Certification Exhaust and Evaporative Tests																							

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-202	**Evaporative Test Number**	Enter an applicable **evaporative** test numbers for this test group/evaporative family combination. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 - 12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an applicable exhaust test numbers for this test group. This is a unique number assigned by Verify to identify this set of test info and results. Character 1 is the Model Year the test was originally run for, Characters 2 - 5 are the Manufacturer code followed by a dash, characters 6 -12 are the sequential 7-digit test number. For the sequential test number, if it begins with 9 its an EPA test, any other number is a ~~Supplemental Federal Test Procedure Calculation Details~~	CertificationDataSubmissionCertificationInformationDetails/CertificationEvaporativeInformationDetails/EvaporativeTestNumberDetails	TestNumberIdentifier	TRUE	1..n	A(12)	String	12	12								Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR056 LD-CERT-TG-BR092	All provided test numbers must exist in Verify.
TG-202.5	Exhaust Test Number		CertificationDataSubmissionCertificationInformationDetails/ExhaustTestNumberDetails	TestNumberIdentifier	TRUE	1..n	A(12)	String	12	12								Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR088 LD-CERT-TG-BR091	All provided test numbers must exist in Verify.
NEW: TG-216.7	**GHG Exempt Status**	**Select the applicable greenhouse gas exemption status for this test group per 40 CFR 86.1801-12. (j) SBA exemption, (k) conditional exemption,**	CertificationDataSubmissionCertificationInformationDetails/TestGroupIdentificationDetails	GreenhouseGasExemptStatusIdentifier	FALSE	1 for each test group	A(3)	Enumeration								**NE = Not Exempt SBA = Small Business Administration Exemption CE = Conditional Exemption**	Light Duty	Certification	**The pull-down list should be displayed in this order: NE, SBA, CE. This field will determine whether Verify calculates CREE and optional CREE and determine whether the GHG-specific Test Results/Emission Names are required.**	Manufacturer	Front End	XML	Add LD-CERT-TG-IB004 Add LD-CERT-TG-BR172	
TG-216.8	**SFTP Compliance Indicator**		CertificationDataSubmissionCertificationInformationDetails/SupplementalFederalTestProcedureCalculationDetails/ComplianceIndicator	ComplianceIndicator	TRUE	1 for each test group	A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML		
TG-216.9	**SFTP Composite CO Option**		CertificationDataSubmissionCertificationInformationDetails/SupplementalFederalTestProcedureCalculationDetails/CompositeCOOptionIndicator	CompositeCOOptionIndicator	FALSE	1 for each test group	A(1)	Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	**Update LD-CERT-TG-BR061**	
TG-217	**Official FTP test number** ~~(for SFTP composite calc)~~	**Enter the** Test Number **of the official FTP test for this test group, procedure used for NMHC+NOx and optionally for CO.**	CertificationDataSubmissionCertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	FTPTestNumber	**TRUE**	**Once per Test Group Fuel (TG-217.1) per test group**	A(12)	String	12	12							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR057 **Delete LD-CERT-TG-BR058 Update LD-CERT-TG-BR062a Update LD-CERT-TG-BR063a Update LD-CERT-TG-BR064b Update LD-CERT-TG-BR064c Update LD-CERT-TG-BR065b Update LD-CERT-TG-BR066 Update LD-CERT-TG-BR080a Add LD-CERT-TG-BR143 Add LD-CERT-TG-BR144 Add LD-CERT-TG-BR145**	~~If SFTP Compliance Indicator is "Y", then this field is required.~~ **NEW: All provided test numbers must exist in Verify.** **NEW: The Test 5-Cycle Category (TI-45) of the test entered in Official FTP Test Number (TG-217) must equal "FTP75".** **NEW: If Hybrid Indicator (TG-7.2) = 'Yes', then Official FTP Test Number (TG-217) cannot be a 3-bag emission test (Associated Test Result/Emission Name (TI-19) of "FE Bag 3" present and "FE Bag 4" not present).** **Need to add business rules for when this official test number is required.**
New: TG-217.1	**Test Group Fuel**	**Select the applicable fuels for each test group**	CertificationDataSubmissionCertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	FuelIdentifier				Enumeration								**D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen ~~EE - Battery Electricity~~ ~~EL - Electricity~~ ~~NA - Not applicable~~**	Light Duty	Certification		Manufacturer	Front End	XML	**Add LD-CERT-TG-IB002b Add LD-CERT-TG-BR158 Add LD-CERT-TG-BR160 Add LD-CERT-TG-BR159**	
TG-218	**Official US06 Test Number** ~~(for SFTP composite calc)~~	**Enter the** Test Number **of the official US06 test for this test group. This US06 test must have split bag fuel economy results. procedure used for NMHC+NOx and optionally for CO.**	CertificationDataSubmissionCertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	US06TestNumber	FALSE	**Once per Test Group Fuel (TG-217.1) per test group**	A(12)	String	12	12							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-TG-BR057 **Delete LD-CERT-TG-BR059 Delete LD-CERT-TG-BR060 Update LD-CERT-TG-BR062b Update LD-CERT-TG-BR063b Update LD-CERT-TG-BR080b Add LD-CERT-TG-BR156 Add LD-CERT-TG-BR157**	~~If SFTP Compliance Indicator is "Y", then this field is required.~~ NEW: **All provided test numbers must exist in Verify.** NEW: **The Test 5-Cycle Category (TI-45) of the test entered in Official US06 Test Number (TG-218) must equal "US06"** **Provided US06 test number must have Test Result/Emission Name = "FE Bag 1" and "FE Bag 2".** **Need to add business rules for when this official test number is required.**
TG-219	**Official SC03 Test Number** ~~(for SFTP composite calc)~~	**Enter the** Test Number **of the official SC03 test for this test group, procedure used for NMHC+NOx and optionally for CO.**	CertificationDataSubmissionCertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	SC03TestNumber	FALSE	**Once per Test Group Fuel (TG-217.1) per test group**	A(12)	String	12	12							Light Duty	Certification		Manufacturer	Front End	XML	**Update LD-CERT-TG-BR062c Update LD-CERT-TG-BR063c Update LD-CERT-TG-BR080c Add LD-CERT-TG-BR146 Add LD-CERT-TG-BR147**	~~If SFTP Compliance Indicator is "Y", then this field is required.~~ **All provided test numbers must exist in Verify.** **The Test 5-Cycle Category (TI-45) of the test entered in Official SC03 Test Number (TG-219) must equal "SC03"** **Need to add business rules for when this official test number is required.**

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
NEW TG-219.1	Official Cold CO Test Number	Enter the Test Number of the official Cold CO test for this test group.	CertificationData Submission/CertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	ColdCOTestNumber/Text	FALSE	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12							Light Duty	Certification		Manufacturer	Front End	XML	Add LD-CERT-TG-BR148 Add LD-CERT-TG-BR149	All provided test numbers must exist in Verify. The Test 5-Cycle Category (T5.45) of the test entered in Official Cold CO Test Number (TG-219.1) must equal "FTP20"
NEW TG-219.2	Official Highway Test Number	Enter the Test Number of the official Highway test for this test group.	CertificationData Submission/CertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	HighwayTestNumber/Text	FALSE	Once per Test Group Fuel (TG-217.1) per test group	A(12)	String	12	12							Light Duty	Certification		Manufacturer	Front End	XML	Add LD-CERT-TG-BR150 Add LD-CERT-TG-BR151	All provided test numbers must exist in Verify. The Test 5-Cycle Category (T5.45) of the test entered in Official Highway Test Number (TG-219.2) must equal "HWY"
New TG-219.3.1	EPA City Litmus Value	The EPA Calculated City litmus value based on the vehicle specific 5-Cycle label equation(s).	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails	CityLitmusValue	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Certification	*** If Hybrid Indicator (TG-7.2) = "No" then: EPA City Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 4.1)) + (0.42 * (0.46/FTP75B2 + 0.41/FTP75B3 + 0.11/US06B1) + 0.18 * (0.5/FTP20B2 + 0.5/FTP20B3) + 0.133 * 1.083 * (I/SC03 - (0.61/FTP75B3 + 0.39/FTP75B2)))] *** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) has Test Result/Emission Name (T5.13) equal to "FE BAG 4" then: EPA City Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3) + 3.9 * (1/FTP75B2 - 1/FTP75B4)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 4.1)) + (0.42 * (0.46/FTP75B4 + 0.41/FTP75B3 + 0.11/US06B1) + 0.18 * (0.5/FTP20B2 + 0.5/FTP20B3) + 0.133 * 1.083 * (I/SC03 - (0.61/FTP75B3 + 0.39/FTP75B4)))] *** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) DOES NOT have Test Result/Emission Name (T5.13) equal to "FE BAG 4" then: EPA City Litmus Value = 0.905 / [(0.33 * ((0.76 * (7.5 * (1/FTP75B1 - 1/FTP75B2)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 4.1)) + (0.42 * (0.5/FTP75B2 + 0.1/US06B1) + 0.18 * (0.5/FTP20B2 + 0.5/FTP20B3) + 0.133 * 1.083 * (I/SC03 - (1/FTP75B2)))] All "MFR FE" values and "FE BAG x" values should be ASTM E67 rounded to 1 decimal place before using in ANY equation listed above.	Manufacturer	Back End	Assigned	Add LD-CERT-TG-BR183	If Official FTP Test Number (TG-217) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3" and Official Highway Test Number (TG-219.2) has Test Result/Emission Name (T5.13) equal to "MFR FE" and Official US06 Test Number (TG-216) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", and "FE BAG 2" and Official Cold CO Test Number (TG-219.1) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3" and Official SC03 Test Number (TG-219) has Test Result/Emission Name (T5.13) equal to "MFR FE" then EPA City Litmus Value (TG-219.3.1) is required, otherwise not allowed.
New TG-219.3.2	EPA City Litmus Threshold	The EPA Calculated City Litmus Threshold based on the derived 5-Cycle city label equation.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails	CityLitmusThresholdValue	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Certification	EPA City Litmus Threshold = [1 / (CityOffset + CitySlope / FE)] x 0.96 Where: CitySlope = Derived 5C City Slope Constant (GL-180) specified for the Model Year CityOffset = Derived 5C City Offset Constant (GL-181) specified for the Model Year FE = Official City Test Number (TG-217) Test Result/Emission Name (T5.13) equal to "MFR FE", ASTM E67 rounded to 1 decimal place. The resulting Litmus Threshold calculation is ASTM E-67 rounded to 1 decimal place	Verify	Back End	Assigned	Add LD-CERT-TG-BR152 Add LD-CERT-TG-BR153 Add LD-CERT-TG-BR154	If Official FTP Test Number (TG-217) has associated Test Result/Emission Name (T5.13) equal to "MFR FE", then EPA City Litmus Threshold (TG-219.3.2) is required, otherwise not allowed.
New TG-219.4.1	EPA Highway Litmus Value	The EPA Calculated Highway Litmus Value based on the vehicle specific 5-Cycle highway label equation(s).	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails	HighwayLitmusValue	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Certification	*** If Hybrid Indicator (TG-7.2) = "No" then: EPA Highway Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 60)) + (1.007 * (0.79/US06B2 + 0.21/HFET) + 0.133 * 0.377 * (I/SC03 - (0.61/FTP75B3 + 0.39/FTP75B2)))] *** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) has Test Result/Emission Name (T5.13) equal to "FE BAG 4" then: EPA Highway Litmus Value = 0.905 / [(0.33 * ((0.76 * (3.6 * (1/FTP75B1 - 1/FTP75B3) + 3.9 * (1/FTP75B2 - 1/FTP75B4)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 60) + (1.007 * (0.79/US06B2 + 0.21/HFET) + 0.133 * 0.377 * (I/SC03 - (0.61/FTP75B3 + 0.39/FTP75B4)))] *** If Hybrid indicator (TG-7.2) = "Yes" and Official FTP Test Number (TG-217) DOES NOT have Test Result/Emission Name (T5.13) equal to "FE BAG 4" then: EPA Highway Litmus Value = 0.905 / [(0.33 * ((0.76 * (7.5 * (1/FTP75B1 - 1/FTP75B2)) + 0.24 * (3.6 * (1/FTP20B1 - 1/FTP20B3))) / 60) + (1.007 * (0.79/US06B2 + 0.21/HFET) + 0.133 * 0.377 * (I/SC03 - (1/FTP75B2)))] All "MFR FE" values and "FE BAG x" values should be ASTM E67 rounded to 1 decimal place before using in ANY equation listed above. The EPA City Litmus Value should be ASTM E67 rounded to 1 decimal place.	Verify	Back End	Assigned	Add LD-CERT-TG-BR183	If Official FTP Test Number (TG-217) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3" and Official Highway Test Number (TG-219.2) has Test Result/Emission Name (T5.13) equal to "MFR FE" and Official US06 Test Number (TG-216) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", and "FE BAG 2" and Official Cold CO Test Number (TG-219.1) has Test Result/Emission Name (T5.13) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3" and Official SC03 Test Number (TG-219) has Test Result/Emission Name (T5.13) equal to "MFR FE" then EPA Highway Litmus Value (TG-219.4.1) is required, otherwise not allowed.
New TG-219.4.2	EPA Highway Litmus Threshold	The EPA Calculated Highway Litmus Threshold based on the derived 5-Cycle highway label equation.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails	HighwayLitmusThresholdValue	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Certification	EPA Highway Litmus Threshold = [1 / (HwyOffset + HwySlope / FE)] x 0.95 Where: HwySlope = Derived 5C Highway Slope Constant (GL-182) specified for the Model Year HwyOffset = Derived 5C Highway Offset Constant (GL-183) specified for the Model Year FE = Official Highway Test Number (TG-219.2) Test Result/Emission Name (T5.13) equal to "MFR FE", ASTM E67 rounded to 1 decimal place. The resulting Litmus Threshold calculation is ASTM E-67 rounded to 1 decimal place	Verify	Back End	Assigned	Add LD-CERT-TG-BR155	If Official Highway Test Number (TG-219.2) has associated Test Result/Emission Name (T5.13) equal to "MFR FE", then EPA Highway Litmus Threshold (TG-219.4.2) is required, otherwise not allowed
TG-219.5	HC-NM+NOX-COMP	calculate and store the HC-NM+NOX Composite value based on the FTP, US06, and SC03 test numbers	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails	CompositeCOValue	FALSE	1..1	N(8,4)	Decimal				8	4	0	9999.9999		Light Duty	Certification		Verify	Back End	Assigned		
TG-219.6	CO-COMP	Verify will calculate and store the CO Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails	CompositeHCNMHCNOXValue	FALSE	1..1	N(8,4)	Decimal				8	4	0	9999.9999		Light Duty	Certification		Verify	Back End	Assigned		
TG-219.7	PM-COMP	Verify will calculate and store the PM Composite value based on the FTP, US06, and SC03 test numbers entered for SFTP.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails	CompositePMValue	FALSE	1..1	N(8,4)	Decimal				8	4	0	9999.9999		Light Duty	Certification		Verify	Back End	Assigned		
NEW TG-8.4	Manufacturer-calculated Combined Test Group CREE Certification Level (Per Test Group Fuel)	Enter the manufacturer-calculated combined (city-55% and highway-45%) test group CREE certification level for each fuel with 120k DFs applied if applicable to each emission name in the separate official city and	CertificationDataSubmission/CertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	ManufacturerCalculatedCombinedTestGroupCarbonRelatedExhaustEmissionCertificationLevelNumber	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4)	Integer				0		9999			Light-Duty	Certification	This data element is supported in the future Release.	Manufacturer	Front End	XML	Add LD-CERT-TG-BR173	If the model year is greater than or equal to 2012, then atleast one of the following data elements is required: CREE (TG-8.4) , Opt-CREE (TG-8.4.1); otherwise, it is not allowed.
NEW TG-8.4.1	Manufacturer-calculated Combined Test Group Opt-CREE Certification Level (Per Test Group Fuel)		CertificationDataSubmission/CertificationInformationDetails/TestGroupIdentificationDetails/GreenhouseGasOfficialTestNumberDetails	ManufacturerCalculatedCombinedTestGroupOptionalCarbonRelatedExhaustEmissionCertificationLevelNumber	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4)	Integer				0		9999			Light-Duty	Certification	This data element is supported in the future Release.	Manufacturer	Front End	XML	Add LD-CERT-TG-BR173	If the model year is greater than or equal to 2012, then atleast one of the following data elements is required: CREE (TG-8.4) , Opt-CREE (TG-8.4.1); otherwise, it is not allowed.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Test Group Information																								
NEW TG-8.5	Verify-calculated Combined Test Group CREE Certification Level (Per Test Group Fuel)	Verify-calculated combined (city-55% and highway-45%) test group CREE certification level for each fuel with 120k DFs applied if applicable to each emission name in the separate official city and	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails/EPAGeneratedCombinedTestGroupCertificationLevelDetails	CombinedTestGroupCarbonRelatedExhaustEmissionCertificationLevelNumber	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4)	Integer						0	9999		Light-Duty	Certificaton	See equations for Combined Test Group CREE/Opt-CREE on the P1--CREE-Calcs tab. Need to add Test Group CREE to LD CSI Report. This data element is supported in the future Release.	Verify	Back End	Assigned		
NEW TG-8.5.1	Verify-calculated Combined Test Group Opt-CREE Certification Level (Per Test Group Fuel)	Verify-calculated combined (city-55% and highway-45%) test group CREE certification level for each fuel with 120k DFs applied if applicable to each emission name in the separate official city and	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails/EPAGeneratedCombinedTestGroupCertificationLevelDetails	CombinedTestGroupOptionalCarbonRelatedExhaustEmissionCertificationLevelNumber	FALSE	Once per Test Group Fuel (TG-217.1) per test group	N(4)	Integer						0	9999		Light-Duty	Certification	See equations for Combined Test Group CREE/Opt-CREE on the P1--CREE-Calcs tab. Need to add Test Group CREE to LD CSI Report. This data element is supported in the future Release.	Verify	Back End	Assigned		
NEW TG-8.6	Discrepancy between Verify and Manufacturer-calculated Combined Test Group CREE (Per Test Group Fuel)	The Verify-calculated discrepancy between manufacturer and Verify-calculated combined test group CREE Certification Level.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails/EPAGeneratedCombinedTestGroupCertificationLevelDetails	CombinedTestGroupCarbonRelatedExhaustEmissionCertificationLevelDiscrepancyNumber	FALSE	1 per fuel per Test Group	N(4)	Integer						0	9999		Light-Duty	Certification		Verify	Back End	Assigned		
NEW TG-8.6.1	Discrepancy between Verify and Manufacturer-calculated Combined Test Group Opt-CREE (Per Test Group Fuel)	The Verify-calculated discrepancy between manufacturer and Verify-calculated combined test group Opt-CREE Certification Level.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedGreenhouseGasDetails/EPAGeneratedCombinedTestGroupCertificationLevelDetails	CombinedTestGroupOptionalCarbonRelatedExhaustEmissionCertificationLevelDiscrepancyNumber	FALSE	2 per fuel per Test Group	N(4)	Integer						0	9999		Light-Duty	Certificaton		Verify	Back End	Assigned		
Exhaust Emission Cert Level Information																								
TG-212.9	**Rounded Emission Result**	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	RoundedEmissionResultValue	TRUE	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal				11	7	0	9999.9999999		Light Duty	Certification	Must use ASTM rounding methodology.	Verify	Back End	Assigned		
TG-213	**Certification Level**	Verify-calculated certification levels for all applicable Test Results/Emission Names.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	CalculatedCertificationLevelValue	TRUE	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)		Light Duty	Certification	Verify should calculate cert levels	Verify	Back End	Assigned		
TG-213.5	**Criteria Pollutant Pass/Fail Indicator**	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	CertificationPassFailIndicator	TRUE	1 for each calculated Cert Level;	A(4)	Enumeration								Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light Duty	Certification	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail". **Pass/Fail will not be determined for: CREE/Opt-CREE.**	Verify	Back End	Assigned		No certificates can be issued if a CSI (test group/evap family combination) has even one Pass/Fail Indicator of "Fail"
Evap Emission Cert Level Information																								
TG-228	**Rounded Emission Result**	Verify will round the unrounded test results for each CSI test number/emission name combination to the same number of digits as the corresponding emission standard plus one digit. Each rounded result will then have the DF applied to calculate the official certification levels.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	RoundedEmissionResultValue	TRUE	1 for each provided unrounded emission result (via test number) for which a corresponding emission standard is provided on the CSI.	N(11,7)	Decimal				11	7	0	9999.9999999		Light Duty	Certification	Must use ASTM rounding methodology.	Verify	Back End	Assigned		
TG-229	**Cert Level**	Verify will calculate cert levels by applying the DF to each rounded emission result.	CertificationDataSubmission/CertificationInformationDetails/EPAGeneratedCertificationDetails/EPAGeneratedExhaustEmissionCertificationLevelDetails	CalculatedCertificationLevelValue	TRUE	1 for each calculated Rounded Emission Result	N(8,4)	Decimal				8	4	0	9999.9999 (note- one additional digit was added to the left of the decimal)		Light Duty	Certification	Verify should calculate cert levels	Verify	Back End	Assigned		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-230	**Pass/Fail Indicator**	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	CertificationData Submission/Certi ficationInformati onDetails/EPAG eneratedCertific ationDetails/EPA GeneratedExhaus tEmissionCertifi cationLevelDetai ls	CertificationPassFa ilIndicator	TRUE	1 for each calculated Cert Level	A(4)	Enumeratio n								Pass = Cert Level <= Standard Fail = Cert Level > Standard	Light Duty	Certification	Verify will compare the Calculated Cert Level with the corresponding standard and will set the Pass/Fail Indicator to "Pass" if the Calculated Cert Level is less than or equal to the standard, otherwise it will be set to "Fail". A certificate will not be issued for any CSIs that contain a "Fail".	Verify	Back End	Assigned		No certificates can be issued if a CSI (test group/evap family combination) has even one Pass/Fail Indicator of "Fail"
Test Procedure Reference Table- This will be used to make sure each CSI (test group/evap family combination) includes at least one test number for each required test category.																								
TG-203	**Test Category**	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories.	CertificationData Submission/Certi ficationInformati onDetails/EPAG eneratedCertific ationDetails	TestCategoryIdenti fier	TRUE	1 per test procedure	A(6)	Enumeratio n								FTP = Federal Test Procedure US06 = US06 SC03 = SC03 HWY = Highway NOx EVAP = Evaporative ~~COLD = Cold CO~~ SPIT = Spitback ORVR = On-board Refueling Vapor Recovery NONHE = Non-City, Non-Highway Exhaust URBRNG = Urban Range HWYRNG = Highway Range **AC-IDLE = A/C Idle Test** **CD = Charge Depleting**	Light Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. EVAP = 23, 27, 34, 38, 43, 47 FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52 HWY = 3 HWYRNG = 63 NONHE = 10, 72, 76 ORVR = 24, 32, 37, 44 SC03 = 95 SPIT = 15 URBRNG = 62 US06 = 90 **A/C Idle = 87, 88** **Charge Depleting = 81, 82, 83**	Verify	Back End	Pre-existing Data		
	Certified Models																							
TG-300	**Carline Manufacturer code**	Enter all applicable carline manufacturer codes that will be certified for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	EPAManufacturerC ode	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(3)	Fixed string			[A-Z0-9]{3}						Light Duty	Certification	CarlineMfr Code + Model Year + Division Code + Carline Code identify a unique carline. The carline mfr code can/will be different than the mfr code in TG-1 (Parent = Test Group identification Detail). Note- The entire set of Certified Models Info must be 1..n so need to delete "minOccurs = 0" from CertifiedModelsDetails in schema.	Manufact urer	Front End	XML	LD-CERT-TG-BR067 LD-CERT-TG-BR089	If the specified mfr code is different than the mfr code of the submitter's CDX user account, must verify that the submitter's mfr code is one of the alternate mfr codes for the specified mfr code (from Mfr Profile).
TG-301	**Division code**	Enter the division code for each carline for this test group. Division is also known as Make.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	ManufacturerDivisi onCode	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(2)	Integer						0	99		Light Duty	Certification	Carline Mfr Code + Model Year + Division Code + Carline Code identify a unique carline.	Manufact urer	Front End	XML	LD-CERT-TG-BR089	
TG-302	**Carline code**	Enter all applicable carline codes for this test group.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	CarlineCode	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(3)	Integer						0	999		Light Duty	Certification	Carline Mfr Code + Model Year + Division Code + Carline Code identify a unique carline.	Manufact urer	Front End	XML	LD-CERT-TG-BR089	
TG-305	**Certification Region Code**	Select all applicable certification region codes for each entered carline code.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	CertificationRegion Code	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(2)	Enumeratio n								CA = California + CAA Section 177 states FA = Federal	Light Duty	Certification		Manufact urer	Front End	XML		
TG-307	**Transmission Type**	Enter the applicable transmission type for this model.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	LightDutyTransmiss ionTypeIdentifier	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(3)	Enumeratio n								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT = Continuously Variable **SCV=Selectable Continuously Variable (e.g. CVT with paddles)** OT = Other	Light Duty	Certification		Manufact urer	Front End	XML		
TG-308	**Transmission Type if Other**	Enter a description of the transmission type if "other" selected.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	LightDutyTransmiss ionTypeOtherText	FALSE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(30)	Normalized string	1	30							Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR068	If TG-307 = Other then TG-308 is required.
TG-309	**Transmission Lockup**	Does this model type have a transmission torque convertor lockup mechanism?	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	TransmissionLocku pIndicator	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML		
TG-310	**Transmission Creeper Gear**	Does this model type have any transmission creeper gear(s)? Creeper gear is defined as having a gear ratio greater than 5:1.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	TransmissionCreep erGearIndicator	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	A(1)	Enumeratio n								Y = Yes N = No	Light Duty	Certification		Manufact urer	Front End	XML		
TG-311	**Total Number of Transmission Gears**	Enter the total number of forward transmission gears for this model type.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaporative InformationDetai ls/CertifiedModel sDetails	TransmissionGearC ount	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmission gear count, drive system identifier	N(2)	Integer						1	99		Light Duty	Certification		Manufact urer	Front End	XML	LD-CERT-TG-BR096	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originato r	Collecti on Point	Collectio n Type	Applicable Business Rules	Validation Rules
Test Group Information																								
TG-312	**Drive system**	Enter the applicable drive system for this model.	CertificationData Submission/Certi ficationInformati onDetails/Certific ationEvaposative InformationDetai ls/CertifiedModel sDetails	TestDriveCode	TRUE	1 for each unique cobination of carline mfr code, division code, carline code, cert region code, transmission type, transmission lockup indicator, transmission creeper gear indicator, transmisaion gear count, drive system identifier	A(1)	Enumeratio n								4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light Duty	Certification		Manufact urer	Front End	XML		

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/ GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collecti on Point	Collecti on Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-0.5	**Process Code**	Select the desired process code for the current submission.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails	informationProcessCode	TRUE	1 per FE Label	A(1)	Enumer ation								N = New dataset C = Correction of an existing Verify dataset	Light Duty	FE Label		Mfr	Front End	XML		If process code=R, D or C a record must exist in Verify for the primary key of this module.
	Model Type Information (A Model Type is defined as "a unique combination of Carline, Basic Engine and Transmission Class")																							
GL-1	**Model Type Index**	Enter the Manufacture r-assigned index number for this model type. It is used as a link to the data set that is associated with the label of this Model Type.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails	ModelTypeIndexNumber	TRUE	1 per FE Label	N(3)	Integer						1	999		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002	Model Type Index + Mfr Code + Model Year must not exist for process code (GL-0.5) = 'N', otherwise, must exist for other process codes.
GL-2	**Manufacturer Code**	The three character code assigned by EPA to each manufacture r. This will be derived from users' CDX account.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails	EPAManufacturerCode	TRUE	1 per FE Label	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	FE Label		Verify	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002 LD-FE-GL-BR042 LD-FE-GL-BR043 LD-FE-GL-BR044a LD-FE-GL-BR044b	Model Type Index + Mfr Code + Model Year must not exist for process code=N, otherwise, must exist for other process codes.
GL-176	**Release Date**	Enter the date this model type information can be released to the public.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails	ReleaseDate	TRUE			Date (YYYYM MDD)			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}									Manufactur er	Front End	XML	CR-BR11 CR-BR12 **New LD-FE-GL-BR097**	~~**If this field is not being moved to Testgroup Info, then it's required when process code (GI-0.5) = 'N', 'C', or 'I'.**~~ **New: The Release Date (GL-176) cannot be before January 2nd of the year prior to Model Year (GL-3) or after December 31st of the Model Year (GL-3).**
GL-3	**Model Year**	Enter the applicable Model Year for this FE Label.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails	ModelYear	TRUE	1 per FE Label	N(4)	Year	4	4				1957	2100		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR001a LD-FE-GL-BR001b LD-FE-GL-BR002 LD-FE-GL-BR004	Model Type Index + Mfr Code + Model Year must not exist for process code=N, otherwise, must exist for other process codes.
GL-4	**Manufacturer FE Label Comments**	Enter any additional comments regarding the FE Label for this Model Type.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails/M anufacturerSubmissionDetails	FuelEconomyLabelComme ntText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR005	Optional for Process Code=N and R, required for Process Code=C and D.
GL-6	**Date Submitted**	A system-generated field indicating the date that this set of label information is submitted to EPA.	FuelEconomyLabelSubmissio nFuelEconomyLabelDetails/M anufacturerSubmissionDetails		TRUE	1 per FE Label	D(8)	Date									Light Duty	FE Label		Verify	Front End	Assigne d		
~~GL-7~~	~~**Manufacturer Fuel Economy Label Contact Name**~~	~~The manufacture r representa tive that should be contacted if EPA has questions regarding this set of fuel economy label information. The primary contact's name email address and phone number will be looked up from the contact information previously entered by the manufacture r in the~~	~~FuelEconomyLabelSubmissio nFuelEconomyLabelDetails/M anufacturerSubmissionDetails /IndividualContactDetails~~	~~ContactNameText~~	~~TRUE~~	~~1 per FE Label~~	~~A(50)~~	~~String~~		~~50~~						~~Ideally, all potential contacts will have user info entered previously in Mfr Info so that the user could choose it from a pull-down of all users for that m5 code. Email address and phone number would then be derived from the corresponding chosen name.~~	~~Light Duty~~	~~FE Label~~		~~Mfr~~	~~Front End~~	~~XML~~		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
~~GL-8~~	~~Manufacturer Fuel Economy Label Contact Email Address~~	~~address of the manufacturer representative that should be contacted if EPA has questions regarding this set of label information. The contact's email address will be looked up from the contact information previously entered by the manufacturer in the Manufacturer Information module of~~	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ManufacturerSubmissionDetails/IndividualContactDetails~~	~~ContactEmailAddressText~~	~~TRUE~~	~~1 per FE Label~~	~~A(100)~~	~~String~~		~~100~~							~~Light Duty~~	~~FE Label~~	~~Ideally, all potential contacts will have user info entered previously in Mfr Info so that the user could choose it from a pull-down of all users for that mfr code. Email address and phone number would then be derived from the corresponding chosen name.~~	~~Verify~~	~~Front End~~	~~XML~~		
~~GL-9~~	~~Manufacturer Fuel Economy Label Contact Phone Number~~	~~number of the manufacturer representative that should be contacted if EPA has questions regarding this set of fuel economy label information. The contact's phone number will be looked up from the contact information previously entered by the manufacturer in the Manufacturer~~	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ManufacturerSubmissionDetails/IndividualContactDetails~~	~~ContactPhoneNumberText~~	~~TRUE~~	~~1 per FE Label~~	~~A(25)~~	~~String~~		~~25~~							~~Light Duty~~	~~FE Label~~	~~Ideally, all potential contacts will have user info entered previously in Mfr Info so that the user could choose it from a pull-down of all users for that mfr code. Email address and phone number would then be derived from the corresponding chosen name.~~	~~Verify~~	~~Front End~~	~~XML~~		
	Car Line Info (Primary Key for a Carline is "Model Yr + Carline Manufacturer Code + Division Code + Carline Code")																							
GL-10	**Carline Manufacturer Code**	Enter the carline manufacturer code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/CarlineDetails	EPAManufacturerCode	TRUE	1 per FE Label	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR003 LD-FE-GL-BR004 LD-FE-GL-BR045 **New LD-FE-GL-BR098**	Must be a valid manufacturer code. If the specified manufacturer code is different than the mfr code of the submitters' CDX user account, must verify that the submitters' mfr code is one of the alternate mfr codes for the specified mfr code in mfr info. The unique combination of model year, certifying manufacturer code, division code and carline code must exist in a previously certified test group.
GL-11	**Division Code**	Enter the division code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/CarlineDetails	ManufacturerDivisionCode	TRUE	1 per FE Label	N(2)	Integer	1	2				1	99		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR004 LD-FE-GL-BR046 **New LD-FE-GL-BR098**	The unique combination of model year, carline manufacturer code, division code and carline code must exist in a previously certified test group.
GL-12	**Carline Code**	Enter the carline code for this FE Label. The unique combination of model year, carline manufacturer code, division code and carline code must exist in a certified test group.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/CarlineDetails	CarlineCode	TRUE	1 per FE Label	N(3)	Integer	1	3				1	999		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR004 LD-FE-GL-BR047 **New LD-FE-GL-BR098**	The unique combination of model year, carline manufacturer code, division code and carline code must exist in a previously certified test group. **NEW: The combination of Carline Manufacturer Code (GL-10), Division Code (GL-11), and CarlineCode (GL-12) must exist at least once in the repeated subconfiguration sales information (GL-125.6, GL-125.6, and GL-125.7).**

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-13.5	**Test Group**	Enter the applicable test group name which, a long with Engine Configuration Number, identifies the Hybrid/Combustion Engine Description (TG-26 through TG-35) and Engine Configuration information (TG-38 through TG-52) to be used for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/BasicEngineDetails	TestGroupName	TRUE	1 per FE Label	A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9][1][A-Z0-9]{4,11}([\.][A-Z0-9]{1,6})?						Light Duty	FE Label	The Testgroup Name will be used to pull in the Hybrid/Combustion Engine Description information (TG-26 through TG-35) from Testgroup Information. The referenced data elements (GL-16 through 54) do not need to be re-stored in FE Label tables, but, they do need to be displayed on FE Label screens.	Mfr	Front End	XML	LD-FE-GL-BR006 LD-FE-GL-BR050	GL-BR6: The combination of Test Group (GL-13.5) and Engine Configuration (GL-25), if provided, must exist in the system as Test Group Information. GL-BR50: Test Group (GL-13.5) must exist in the system.
NEW GL-13.5.1	Drive Source	Enter the applicable value for the drive source for this test group. Select 'E' for fuel cell electric vehicle.			TRUE	1..2 per Test Group	A(1)	Enumeration								C = Combustion Engine E = Electric Motor ~~H = Hybrid~~	Light Duty	FE Label	NEW TG-7.1	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.2	Hybrid Indicator	Are the vehicles in this test group hybrid electric vehicles (HEVs) as defined in 40 CFR 86.1803-01?			TRUE	1 per Test Group	A(1)	Enumeration								N - No Y - Yes	Light Duty	FE Label	NEW TG-7.2	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.3	Fuel(s)	Enter all applicable fuels for this test group.	TestVehicleInformationSubmission/TestVehicleInformationDetails/VehicleConfigurationDetails	FuelIdentifier	TRUE	1..n per Drive Source per Test Group	A(3)	Enumeration								G - Gasoline D - Diesel M - Methanol E - Ethanol CNG - Compressed Natural Gas LNG - Liquified Natural Gas LPG - Liquid Petroleum Gas H - Hydrogen EL - Electricity HYD - Hydraulic	Light Duty	FE Label	NEW TG-7.3	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.4	Basic fuel metering system	Enter the applicable fuel metering system type for this test group.		PrimaryFuelMeteringSystemIdentifier	FALSE	Once per Fuel per test group.	A(4)	Enumeration								MIR = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = ~~Gasoline~~ Spark Ignition Direct fuel injection SDPI = Spark Ignition direct & ported injection LMIX = LPG Mixer CRDI = Common Rail Direct Diesel Injection GFI = Gaseous Fuel Injection DDI = Direct Diesel Injection (non-common rail) IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light Duty	FE Label	NEW TG-7.4	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.5	Lean Burn Strategy Indicator	Does the fuel metering system employ lean burn strategy (e.g. to significantly improve the fuel economy of the vehicle)?			FALSE	Once per Selected Fuel (TG-7.3) per test group.	A(3)	Enumeration								N=No Y=Yes	Light Duty	FE Label	NEW TG-7.4.1	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.6	Multiple Fuel Storage-Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels stored separately or together?			FALSE	1 per test group	A(8)	Enumeration								SEPARATE - Fuels Stored Separately TOGETHER- Fuels Stored Together	Light Duty	FE Label	NEW TG-7.6	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.7	Multiple Fuel Combustion-Separate or Together	If multiple fuels are selected for Fuel(s), are the fuels combusted separately or together?			FALSE	1 per Test Group	A(8)	Enumeration								SEPARATE- Fuels Combusted Separately TOGETHER - Fuels Combusted Together	Light Duty	FE Label	NEW TG-7.7	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.8	Fuel Cell Indicator	Are vehicles within this test group equipped with a Fuel Cell?			FALSE	1 per Test Group	A(1)	Enumeration								N - No Y - Yes	Light Duty	FE Label	NEW TG-7.8	Verify	Back End	Pre-existing Data		Previously validated in test group info.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
NEW GL-13.5.9	Rechargable Energy Storage System Indicator	Are vehicles within this test group equipped with a rechargable energy storage system?			FALSE	1 per Test Group	A(1)	Enumeration								N - No Y - Yes	Light Duty	FE Label	NEW TG-7.9	Verify	Back End	Pre-existing Data		Previously validated in test group info.
NEW GL-13.5.12	Off-board Charge Capable Indicator	Select "Yes" if vehicles within this test group are equipped with an electric motor that is capable of being charged off-board the vehicle, otherwise select "No".			FALSE	1 per Test Group	A(1)	Enumeration								N - No Y - Yes	Light Duty	FE Label	NEW TG-8.3	Verify	Back End	Pre-existing Data		Previously validated in test group info.
~~GL-14~~	~~Drive Source~~	~~The applicable value for the drive source for this FE Label. Select 'E' for fuel cell, electric, vehicle.~~		~~DriveSourceIdentifier~~	~~TRUE~~	~~1 per FE Label~~	~~A(1)~~	~~Enumeration~~								~~C = Combustion Engine E = Electric Motor H = Hybrid~~	~~Light Duty~~	~~FE Label~~		~~Verify~~	~~Back End~~	~~Pre-Existing Data~~		Previously validated in test group info.
~~GL-15~~	~~Vehicle Fuel Category~~	~~The applicable vehicle fuel category for this FE Label.~~		~~VehicleFuelCategoryIdentifier~~	~~TRUE~~	~~1 per FE Label~~	~~A(2)~~	~~Enumeration~~								~~SF-Single Fuel RF-Flex Fuel (fuel premixed and combusted together) RH-Flex-fuel hybrid DF-Dual Fuel (2 separate fuel tanks, separate combustion) BF-Bi-Fuel (2 separate fuel tanks combusted together) HV-Hybrid EV-Battery-Electric FC-Fuel Cell Electric~~	~~Light Duty~~	~~FE Label~~	~~Will be pulled in based on the test group name (GL-13.5) TG-8~~	~~Verify~~	~~Back End~~	~~Pre-Existing Data~~		Previously validated in test group info.
	Basic Engine Info - Hybrid/Combustion Description					0..1																		**Data set GL-14 to GL-25 is not allowed if GL-14 = 'E'.**
GL-16	**Hybrid Type**	Enter the applicable type of Hybrid system for this Basic Engine for this FE Label.		HybridTypeIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								EM = IC Engine/Electric Motor EH = IC Engine/Hydraulic OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5) TG-26	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-17	**Hybrid Type Description, if Other**	Enter a description of the hybrid system for this Basic Engine for this FE Label if "Other" (OT) is selected for "Hybrid Type".		HybridTypeOtherText	FALSE	1 per FE Label	A(100)	String	1	100							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-27	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-18	**Engine Type**	Enter the applicable engine type for this Basic Engine for this FE Label.		EngineTypeIdentifier	FALSE	1 per FE Label	A(4)	Enumeration								4SI - 4-Stroke Spark Ignition 2SI - 2-Stroke Spark Ignition 4SCI - 4-Stroke Compression Ignition 2SCI - 2-Stroke Compression Ignition RT - Rotary GT - Gas Turbine RK - Rankine STIR - Stirling OT - Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-28	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-19	**Engine Type Description, if Other**	Enter a description of the engine for this Basic Engine for this FE Label for gas turbine, rankine, sterling or "other" engine types.		EngineTypeOtherText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-29	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-20	**Engine Block Arrangement**	Enter the applicable engine block arrangement for this Basic Engine for this FE Label.		EngineBlockArrangementIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								I = Inline V = V-shaped engine H = Horizontally Opposed W = W-shaped engine RT = Rotary OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-30	Verify	Back End	Pre-Existing Data		Previously validated in test group info.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-21	**Engine Block Arrangement Description, if Other**	Enter a description of the engine block arrangment for this Basic Engine for this FE Label if "other" is selected.		EngineBlockArrangementOtherText	FALSE	1 per FE Label	A(500)	String	1	500							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-31	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-22	**Number of Cylinders/Rotors**	Enter the number of cylinders or rotors for this Basic Engine for this FE Label.		CylindersOrRotorsCount	FALSE	1 per FE Label	N(2)	Integer						0	20		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-32	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
NEW GL-22.1	Camless Valvetrain Indicator	Do the engines in this test group use something other than a camshaft to accuate the intake and exhaust valves?			TRUE	Once per test group.	A(3)	Enumeration								N = No Y = Yes	Light Duty	FE Label	TG-32.5	Verify	Back End	Pre-Existing Data		
NEW GL-22.2	Oil Viscosity/Classification	Enter oil Viscosity and classification recommended for use in summer (e.g.100deg F ambient temp) for engines in this test group (e.g. 0W20 CF 4, 5W20 GF3, etc)			TRUE	Once per test group.	A(25)	String	1	25							Light Duty	FE Label	TG-32.6	Verify	Back End	Pre-Existing Data		
Delete: GL-23	Basic fuel metering system 1	Enter the applicable fuel metering system type for this Basic Engine for this FE Label.		PrimaryFuelMeteringSystemIdentifier	FALSE	1 per FE Label	A(4)	Enumeration								MPI = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = Gasoline Direct fuel Injection LMIX = LPG Mixer CRDI = Common Rail Diesel Injection GFI = Gaseous Fuel Injection IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-33	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
Delete: GL-24	Basic fuel metering system 2	Enter the applicable second fuel metering system type for this Basic Engine for this FE Label.		SecondaryFuelMeteringSystemIdentifier	FALSE	1 per FE Label	A(4)	Enumeration								MPI = Multipoint/sequential fuel injection CMIX = CNG mixer unit GDI = Gasoline Direct fuel Injection LMIX = LPG Mixer CRDI = Common Rail Diesel Injection GFI = Gaseous Fuel Injection DDI = Direct Diesel Injection IDI = Indirect Diesel Injection TBI = Throttle Body Injection OT = Other (contact EPA prior to use)	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-35	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-25	**Engine Configuration Number**	Enter the applicable Engine Configuration Number which, along with Test Group Name, identifies the Engine Configuration information (TG-38 through TG-52) to be used for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/BasicEngineDetails	EngineConfigurationNumber	FALSE	1 per FE Label	N(2)	Integer						1	99		Light Duty	FE Label	The Engine Configuration Number along with the Testgroup Name (GL-13.5) will be used to pull in the Hybrid/Combustion Engine Description information (TG-26 through TG-35) from Engine Configuration Information within Testgroup Information. The referenced data elements (GL-16 through 54) do not need to be re-stored in FE Label tables, but, they do need to be displayed on FE Label screens.	Mfr	Front End	XML	LD-FE-GL-BR006 **Update LD-FE-GL-BR040**	This engine configuration number must exist in combination with the test group name cited above (GL-13.5) in Testgroup Information. **Required when Drive Source (GL-13.5.1) is 'C' (Combustion Engine).**
GL-26	**Engine Displacement (liters)**	The engine displacement for this FE Label. (In Liters)		EngineDisplacementValue	FALSE	1 per FE Label	N(5,3)	Decimal				5	3	0.001	99.999		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-38	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-27	**Cylinder Deactivation**	Does this FE Label utilize cylinder deactivation technologies? This is sometimes referred to as variable displacement.		CylinderDeactivationIndicator	FALSE	1 per FE Label	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-39	Verify	Back End	Pre-Existing Data		Previously validated in test group info.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-28	**Cylinder Deactivation Description**	The description of the cylinder deactivation technology utilized on this FE Label.		CylinderDeactivationDescriptionText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-40	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-29	**Variable Valve Timing**	Does this FE Label utilize variable valve timing technology?		VariableValveTimingIndicator	FALSE	1 per FE Label	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-41	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-30	**Variable Valve Timing System Description**	The description of the variable valve timing technology utilized on this FE Label.		VariableValveTimingDescriptionText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-42	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-31	**Variable Valve Lift?**	Is this FE Label equipped with a variable valve lift mechanism?		VariableValveLiftIndicator	FALSE	1 per FE Label	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-43	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-32	**Variable Valve Lift System Description**	The description of the variable valve lift mechanism utilized on this FE Label.		VariableValveLiftDescriptionText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-44	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-33	**Number of Inlet Valves Per Cylinder**	The number of inlet valves per cylinder for this FE Label. 0 if not applicable.		InletValvesPerCylinderCount	FALSE	1 per FE Label	N(1)	Integer						0	9		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-45	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-34	**Number of exhaust Valves Per Cylinder**	The number of exhaust valves per cylinder for this FE Label. 0 if not applicable.		ExhaustValvesPerCylinderCount	FALSE	1 per FE Label	N(1)	Integer						0	9		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-46	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-35	**Air Aspiration Method**	The applicable air aspiration methods for this FE Label.		AirAspirationMethodIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-47	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-36	**Number of Air Aspiration Devices**	The number of air aspiration devices for this FE Label.		AirAspirationDeviceCount	FALSE	1 per FE Label	N(2)	Integer						0	99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-48	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-37	**Air Aspiration Device Configuration**	The air aspiration device configuration for this FE Label.		AirAspirationConfigurationIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								N = Single P = Parallel S = Series PS = Both (Parallel and Series)	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-49	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-38	**Air Aspiration Method, if Other**	The description of the air aspiration method for this FE Label if "other" is selected.		AirAspirationMethodOtherText	FALSE	1 per FE Label	A(30)	String	1	30							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-50	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-39	**Charge Air Cooler Type**	The applicable charge air cooler type for this FE Label.		ChargeAirCoolerIdentifier	FALSE	1 per FE Label	A(1)	Enumeration								A = Air L = Liquid N = N/A	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-51	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-40	**Engine Configuration Comments**	Additional comments about this FE Label.		ManufacturerCommentText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-52	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
	Hybrid, Electric Vehicle and Fuel Cell Information																							
GL-41	**Rechargeable Energy Storage System~~Device~~**	Enter the applicable type of energy storage device for this test group.		EnergyStorageDeviceIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								B = Battery(s) C = Capacitor ~~BC = Battery and Capacitor~~ ~~H = Hydraulic~~ OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-77	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-42	**Rechargeable Energy Storage Device if Other**	Enter a description of the energy storage device for this test group if "other" selected.		EnergyStorageDeviceOtherText	FALSE	1 per FE Label	A(30)	String	1	30							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-78	Verify	Back End	Pre-Existing Data		Previously validated in test group info.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-43	**Battery Type**	The applicable type of battery for this FE Label.		BatteryTypeIdentifier	FALSE	1 per FE Label	A(4)	Enumeration								LA = Lead Acid NIMH = NiMH LI = Li+ OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-79	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-44	**Battery Type if Other**	The description of the battery type for this FE Label if "other" selected.		BatteryTypeOtherText	FALSE	1 per FE Label	A(30)	String	1	30							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-80	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-45	**Number of Batteries**	The total number of batteries for this FE Label. Does not include starter batteries.		BatteryCount	FALSE	1 per FE Label	N(3)	Integer						0	999		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-81	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-46	**Total Voltage of Battery Pack(s)**	The total voltage of all battery pack(s) for this FE Label. Does not include starter batteries. (in Volts)		BatteryTotalVoltageMeasure	FALSE	1 per FE Label	N(3)	Integer						1	999		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-82	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-47	**Battery Energy Capacity**	The battery energy capacity for this FE Label. Does not include starter batteries. (in Ah)		BatteryEnergyCapacityMeasure	FALSE	1 per FE Label	N(4,2)	Decimal				4	2	0.01	99.99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-83	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-48	**Battery Specific Energy**	The battery specific energy for this FE Label. Does not include starter batteries. (in Whr/kg)		BatterySpecificEnergyMeasure	FALSE	1 per FE Label	N(5,1)	Decimal				5	1	0.1	9999.9		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-84	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-49	**Battery Charger Type**	The applicable type of battery charger type for this FE Label.		BatteryChargerTypeIdentifier	FALSE	1 per FE Label	A(3)	Enumeration								ON = On-Board OFF = Off-Board B = Both	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-85	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-50	**Number of Capacitors**	The number of capacitors for this FE Label.		CapacitorCount	FALSE	1 per FE Label	N(2)	Integer						0	99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-86	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-51	**Capacitor Rating In Farads**	The rating of each capacitor number (in farads).		CapacitorRatingValue	FALSE	1..n	N(4,2)	Decimal				4	2	0.01	99.99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-87	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-52	**Capacitor Comments**	Any additional comments about the capacitor(s) for this FE Label.		CapacitorCommentText	FALSE	1 per FE Label	A(100)	String	1	100							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-88	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-53	**Hydraulic System Description**	The description of the hydraulic system for this FE Label.		HydraulicSystemDescriptionText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-89	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-54	**Regenerative Braking Type**	The applicable type of regenerative braking technology utilized on this FE Label.		BrakingTypeIdentifier	TRUE	1 per FE Label	A(3)	Enumeration								NA = Not applicable (default) ERE = Electrical Regen Brake HRE = Hydraulic Regen Brake OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-90	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-55	**Regenerative Braking Type if "Other"**	The description of the type of regenerative braking technology utilized on this FE Label if "other" is selected.		BrakingTypeOtherText	FALSE	1 per FE Label	A(1000)	String									Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-91	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-56	**Regenerative Braking Source**	The applicable source of regenerative braking for this FE Label.		BrakingSourceIdentifier	FALSE	1 per FE Label	A(1)	Enumeration								F = Front Wheels R = Rear Wheels B = Both	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-92	Verify	Back End	Pre-Existing Data		Previously validated in test group info.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-57	**Driver Controlled Regenerative Braking**	Does this FE Label have driver-controlled regenerative braking?		DriverControlledBrakingIndicator	FALSE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-93	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-58	**Number of Drive Motor/Generator(s)**	The number of drive motor/generator(s) for this FE Label.		MotorGeneratorCount	FALSE	1 per FE Label	N(1)	Integer						0	9		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-94	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-59	**Motor/Generator Type**	The applicable type of motor/generator for this FE Label.		GeneratorTypeIdentifier	FALSE	1..n	A(4)	Enumeration								ACI = AC Induction DCB = DC Brushless DCPM = DC Permanent Magnet, brushless SR = Switched Reluctance OT = Other	Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-95	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-60	**Motor/Generator Type if Other**	The description of the type of motor/generator for this FE Label if other is selected.		GeneratorTypeOtherText	FALSE	1..n	A(30)	String	1	30							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-96	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-61	**Rated Motor/Generator Power**	The rated power of the motor/generator for this FE Label. (in kWatt)		GeneratorRatedPowerValue	FALSE	1..n	N(3)	Integer						1	999		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-97	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-62	**Fuel Cell Description**	The description of the fuel cell for this FE Label.		FuelCellDescriptionText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-98	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-63	**Fuel Cell On-Board H2 Storage Capacity**	The on-board hydrogen storage capacity for this FE Label. (in kg)		FuelCellOnboardHydrogenStorageMeasure	FALSE	1 per FE Label	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-99	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-64	**Usable H2 Fill Capacity**	The usable hydrogen fill capacity for this FE Label. (in kg)		UsableHydrogenFillCapacityMeasure	FALSE	1 per FE Label	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-100	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
GL-65	**HEV EV Comments**	Any additional comments for this electric vehicle or hybrid-electric vehicle.		ManufacturerCommentText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label	GL-16 through GL-65 has been previously entered in Certification data. It can be derived from the Verify back end via the Test Group (GL13.5). TG-101	Verify	Back End	Pre-Existing Data		Previously validated in test group info.
	Transmission Class Information																							
GL-67	**Transmission Type**	Enter the applicable transmission type for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionTypeIdentifier	TRUE	1 per FE Label	A(3)	Enumeration								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) OT = Other	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR093 New LD-FE-GL-BR117	GL-BR58: If Transmission Type (GL-67) is equal to 'CVT' (Continuously Variable), then Number of Transmission Gears (GL-71) must equal '1'.
GL-68	**Transmission Type If Other**	Enter a description of the transmission type if "other" is selected.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionTypeOtherText	FALSE	1 per FE Label	A(30)	Normalized string	1	30							Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR007	If GL-67 = Other then GL-68 is required.
GL-69	**Transmission Lockup**	Does this FE Label have a transmission torque converter lock-up mechanism?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionLockupIndicator	TRUE	1 per FE Label	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR117	
GL-70	**Transmission Creeper Gear**	Does this FE Label have any transmission creeper gear(s)? Creeper gear is defined as having a gear ratio greater than 5.000.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionCreeperGearIndicator	TRUE	1 per FE Label	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR117	
GL-71	**Total Number of Transmission Gears**	Enter the total number of forward transmission gears for this FE Label. Enter "1" for CVT or direct drive.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionGearCount	TRUE	1 per FE Label	N(2)	Integer						1	99		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR058 New LD-FE-GL-BR117	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-72	**Drive system**	Enter the applicable drive system for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TestDriveCode	TRUE	1 per FE Label	A(1)	Enumeration								4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A= All wheel drive	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR117	
GL-73	**Transmission Over Drive**	Enter the applicable transmission overdrive system for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionOverdriveIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								1 = No gear ratio < 1 2 = Top gear ratio < 1	Light Duty	FE Label		Mfr	Front End	XML		
GL-74	**Shift Indicator Light**	Is a shift indicator light utilized for this FE Label? 'Yes' can only be selected for manual or automated manual transmissions.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	ShiftIndicatorLightUsageIndicator	TRUE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR008	Y is only valid when GL-67 = 'M' or 'AM' or 'OT'.
GL-75	**Engine Management System**	Is an engine management system (i.e. Stop/Start engine device) utilized for this FE Label? (See A/C 83A, page 4.)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	EngineManagementSystemIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes L = Yes, but with lock-out features	Light Duty	FE Label		Mfr	Front End	XML		
GL-76	**Number of Transmission Modes**	Enter the number of transmission modes for this FE Label. (See A/C 83A, page 4.)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	TransmissionModeNumberIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								N = Not applicable V= Continuously variable, user selectable C = Computer controlled multiple gear ratios 1 = 1 discrete lock-up rpm range 2 = 2 discrete lock-up rpm ranges 3 = 3 discrete lock-up rpm ranges 4 = 4 discrete lock-up rpm ranges 5 = 5 discrete lock-up rpm ranges 6 = 6 discrete lock-up rpm ranges 7 = 7 discrete lock-up rpm ranges 8 = 8 discrete lock-up rpm ranges 9 = 9 discrete lock-up rpm ranges	Light Duty	FE Label		Mfr	Front End	XML		
GL-77	**Variable lockup point**	Enter the applicable variable lockup point for this FE Label. (See A/C 83A, page 4.)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	VariableLockupPointIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								N = Not applicable V = Continuously variable C = Computer controlled multiple gear ratios 1 = 1 discrete lock-up rpm range 2 = 2 discrete lock-up rpm ranges 3 = 3 discrete lock-up rpm ranges 4 = 4 discrete lock-up rpm ranges 5 = 5 discrete lock-up rpm ranges 6 = 6 discrete lock-up rpm ranges 7 = 7 discrete lock-up rpm ranges 8 = 8 discrete lock-up rpm ranges 9 = 9 discrete lock-up rpm ranges	Light Duty	FE Label		Mfr	Front End	XML		
GL-78	**Declutching/Free Wheeling**	Is declutching or freewheeling utilized for this FE Label? (See A/C 83A, page 4.)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	DeclutchingFreeWheelingIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes L = Yes, but with lock-out features	Light Duty	FE Label		Mfr	Front End	XML		
NEW GL-78.1	**Transmission as listed in the FE Guide**	Verify will determine the value for Transmission as listed in the Fuel Economy Guide from the values entered for Transmission Type (GL-67) and Number of Transmission Gears (GL-71).			TRUE	1 per FE Label	A(12)	Enumeration								Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SCV= "Auto(AV-SX)" OT = "Other(OT-X)" Derived field is in quotes-- where: X is the total number of forward gears listed in GL-71.	Light Duty	FE Label	Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SVC= "Auto(AV-SX)" OT = "Other(OT-X)" Derived field is in quotes-- where: X is the total number of forward gears listed in GL-71.	Verify	Back End	Assigned		
NEW GL-78.2	**Model Type Descriptor**	Enter a description of this Model Type to distinguish between otherwise identical model types that have different fuel economy label values. Use of the Model Type Descriptor is subject to	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/TransmissionClassDetails	ModelTypeDescriptionText	FALSE	1 per FE Label	A(30)	String	1	30							Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR099	New: If the combination of Model Year (GL-3), Carline Manufacturer Code (GL-10), Division Code (GL-11), Carline Code (GL-12), Test Group (GL-13.5), Engine Configuration Number (GL-25), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), Number of Transmission Modes (GL-76), and Drive System (GL-72) already exists in a fuel economy label then Model Type Descriptor Field (GL-78.2) is required.
	FE Label Information																							

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-79	**Fuel Economy Label Calculation Approach**	Enter the fuel economy label calculation approach for this FE Label as follows: When Drive Source (GL-14) is a combustion engine ('C') or hybrid ('H') select: SC-DRV = Derived 5-cycle Calculation Approach for both city and highway labels	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	LabelCalculationApproachIdentifier	TRUE	1 per FE Label	A(10)	Enumeration								SC-DRV = Derived 5-cycle label SC-VEHSPEC = Vehicle Specific 5-cycle label SC-MOD = Derived Vehicle Specific 5-cycle Calculation Approach for city label but Modified 5-cycle Calculation Approach for Highway label ~~Modified 5-cycle label~~ EV = Electric Vehicle 2-cycle label ~~EV-5C = Electric Vehicle 5-cycle label~~ PHEV = Plug-in Hybrid Label	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR009 New LD-FE-GL-BR100 New LD-FE-GL-BR101	If there is only one Drive Source (GL-14) and that Drive Source equals 'E' (Electric Motor), then Fuel Economy Label Calculation Approach (GL-79) must equal 'EV' (Electric Vehicle 2-cycle label) or 'EV-5C' (Electric Vehicle 5-cycle label) If Drive Source (GL-14) equals 'C' (Combustion Engine) and 'E' (Electric Motor) and Off-board Charge Capable Indicator (GL-13.5.12) equals 'Yes,' then Fuel Economy Label Calculation Approach (GL-79) must equal 'PHEV' (Plug-in Hybrid Label)
NEW GL-79.1	5 Cycle Hybrid Fuel Economy Label Calculation Approach	Select the applicable 5-cycle hybrid fuel economy label calculation approach.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	Hybrid5CycleCalculationApproachIdentifier	FALSE	1 per FE Label	A(6)									HEV-2B = Hybrid 2 Bag HEV-4B = Hybrid 4 Bag	Light Duty	FE Label		Mfr	Front End	XML		
NEW GL-79.2	Charge Depleting Fuel Economy Label Calculation Approach	Select the applicable value for the charge depleting fuel economy label calculation approach.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	ChargeDepletingLabelCalculationApproachIdentifier	FALSE	1 per FE Label	A(5)									CD-2C = Charge Depleting 2-cycle CD-5C = Charge Depleting 5-cycle	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR102	If Fuel Economy Label Calculation Approach (GL-79) is equal to 'PHEV' (Plug-In Hybrid Label), then Charge Depleting Fuel Economy Label Calculation Approach (GL-79.2) is required, otherwise not allowed.
NEW GL-79.3	Charge Sustaining Fuel Economy Label Calculation Approach	Select the applicable value for the charge sustaining fuel economy label calculation approach.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	ChargeSustainingLabelCalculationApproachIdentifier	FALSE	1 per FE Label	A(5)									CS-2C = Charge Sustaining 2-cycle CS-3C = Charge Sustaining 3-cycle CS-5C = Charge Sustaining 5-cycle	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR103	If Fuel Economy Label Calculation Approach (GL-79) is equal to 'PHEV' (Plug-In Hybrid Label), then Charge Sustaining Fuel Economy Label Calculation Approach (GL-79.3) is required, otherwise not allowed.
~~GL-80~~	~~5 Cycle Hybrid Calculation Approach~~	~~Enter the vehicle-specific 5-Cycle hybrid calculation approach for this FE Label as follows, if applicable:~~	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails~~	~~Hybrid5CycleCalculationApproachIdentifier~~	~~FALSE~~	~~1 per FE Label~~	~~A(7)~~									~~HY2B = Hybrid 5-cycle label using 2 bag testing results~~ ~~HY4B = Hybrid 5-cycle label using 4 bag testing results~~ ~~HMOD2B = Hybrid modified 5-cycle label using 2 bag testing results~~ ~~HMOD4B = Hybrid modified 5-cycle label using 4 bag testing results~~ ~~HY2B4B = Hybrid 5-cycle label using 2 bag and 4 bag testing results~~ ~~HM2B4B = Hybrid modified 5-cycle label using 2 bag and 4 bag testing results~~ ~~2?2 = PHEV Charge Depete 5-cycle~~ ~~2?2 = PHEV Charge Deplete modified 5-cycle~~	~~Light Duty~~	~~FE Label~~		~~Mfr~~	~~Front End~~	~~XML~~	**Delete LD-FE-GL-BR010**	~~Required if GL-14 (Drive Source) = 'H' (Hybrid).~~
GL-82	**Model Type Suppression Indicator**	EPA Only. Enter whether this Model Type should be suppressed from the Fuel Economy Guide.			FALSE	1 per FE Label	A(1)	Enumeration								N = No (default) Y = Yes	Light Duty	FE Label		EPA	Back End	Assigned		
GL-83	**FE Label Self-Approval Date**	Enter the self-approval date determined by a manufacturer for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	LabelSelfApprovalDate	TRUE	1 per FE Label	D(8)	Date			[1-2][1][0-9][3][0-1][1][0-9][1][0-3][1][0-9][1]					Valid calendar date.	Light Duty	FE Label		Mfr	Front End	XML		
GL-84	**Unique Label**	Is this a unique label?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	UniqueLabelIndicator	FALSE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label		Mfr	Front End	XML		
GL-85	**Mfr Voluntary Lower MPG or Higher Energy Consumption Label Value ~~Indicator~~**	Are you voluntarily using a lower mpg value or higher energy consumption value for city or highway than was calculated for this FE Label?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	VoluntaryLowerMPGLabelIndicator	TRUE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes (city, highway or both are lower)	Light Duty	FE Label	Even though the city, highway, or combined mpg will be lower, EPA should recalculate the combined mpg for use in the annual fuel cost estimation.	Mfr	Front End	XML	New LD-FE-GL-BR104	NEW: If Mfr Voluntary Lower MPG or Higher Energy Consumption Label Value (GL-85) is equal to 'Yes' then at least one of the following three statements for a Fuel Usage (GL-89) must be true for at least one Fuel Usage (GL-89) for the label: If Fuel Economy Value Unit (GL-90) is equal to 'MPG' (miles per gallon) or 'MPK' (miles per kilogram) then: 1) Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) is less than Mfr Calculated Rounded Adjusted Model Type City FE Value (GL-97) 2) Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) is less than Mfr Calculated Rounded Adjusted Model Type Highway FE Value (GL-98) 3) Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is less than Mfr Calculated Rounded Adjusted Model Type Combined FE Value (GL-99) If Fuel Economy Value Unit (GL-90) is equal to 'KW-HR100' (kilowatt-hour per 100 miles) then: 1) Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) is greater than Mfr Calculated Rounded Adjusted Model Type City FE Value (GL-97) 2) Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) is greater than Mfr Calculated Rounded Adjusted Model Type Highway FE Value (GL-98) 3) Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is greater than Mfr Calculated Rounded Adjusted Model Type Combined FE Value (GL-99)

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-86	**Police or Emergency Vehicle Only**	Does this FE Label only include police or emergency vehicles?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	PoliceEmergencyVehicleOnlyIndicator	TRUE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label	"Police only" vehicle should not be included in the Fuel Economy Guide	Mfr	Front End	XML		
GL-87	**Label Recalculation**	Are you submitting recalculated FE Label values due to a Running Change?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	LabelRecalculationIndicator	FALSE	1 per FE Label	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR011 LD-FE-GL-BR012	If Process Code (GL-0.5) = 'N' must not be present. Required if Process Code (GL-0.5) = 'C'.
GL-88	**Relabel**	Did the label recalculation generate either higher or lower mpg values in comparison with the original label values? (note: This is a combination of ""new Label indicator" and "Relabel Option" in CFEIS G1)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/LabelDetails	RelabelChangeIdentifier	FALSE	1 per FE Label	A(2)	Enumeration								RL = Relabel - label value decreased RH = Relabel option - label value increased	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR013 LD-FE-GL-BR014	If Process Code (GL-0.5) = 'N' must not be present. Required if GL-87 (Label Recalculation) = 'Y', else must not be present.
Fuel Usage and Fuel Economy Values																								
GL-89	**Fuel Usage**	Enter the applicable fuel used for this FE Label.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	FuelUsageIdentifier	TRUE	~~1..3~~ 1..n per FE Label ~~(1 per Usage value)~~ (1 per Usage value)	A(3)	Enumeration								G = Gasoline (Regular Unleaded Recommended) GM = Gasoline (Mid Grade Unleaded Recommended) GMR = Gasoline (Mid Grade Unleaded Required) GP = Gasoline (Premium Unleaded Recommended) GPR = Gasoline (Premium Unleaded Required) D = Diesel, low sulfur (500 ppm) (obsolete after MY2006), DU = Diesel, ultra low sulfur (15 ppm, maximum) M = Methanol E = Ethanol ~~(E85)~~ CNG = Compressed Natural Gas LNG = Liquefied Natural Gas LPG = Liquid Petroleum Gas H = Hydrogen EL = Electricity ~~BE = Battery Electric~~ ~~PE = Plug-in Hybrid Electric~~	Light Duty	FE Label	Existing values of 'D' (Diesel, low sulfur (500 ppm)) are valid.	Mfr	Front End	XML	LD-FE-GL-BR015 LD-FE-GL-BR016 LD-FE-GL-BR049 LD-FE-GL-BR051	If one of the values that begins with 'G' is selected for fuel usage, then the second fuel usage (if present) must not begin with 'G'. If one of the values that begins with 'D' is selected for fuel usage, then the second fuel usage (if present) must not begin with 'D'.
GL-90	**Fuel Economy Value Unit**	Enter the applicable unit of measure for fuel economy values based on this Fuel Usage value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	FuelEconomyValueUnitIdentifier	TRUE	~~1..3~~ (1 per Fuel Usage value)	A(8)			3	8					MPG = miles per gallon (default) MPK = miles per kilogram KW-HR/100MILES = kilowatt-hour per 100 miles	Light Duty	FE Label	FE Units might be changing with the new FE Label rule	Mfr	Front End	XML	LD-FE-GL-BR017 LD-FE-GL-BR018 LD-FE-GL-BR041 New LD-FE-GL-BR105 New LD-FE-GL-BR106 New LD-FE-GL-BR107	If Drive Source (GL-13.5.1) equals 'C' (Combustion Engine), then Fuel Economy Value Unit (GL-90) equals 'MPG' (miles per gallon). If Fuel Usage (GL-89) equals 'H' (Hydrogen) and Fuel Cell Indicator (GL-13.5.8) equals 'Yes' then Fuel Economy Value Unit (GL-90) must be 'MPK' (miles per kilogram). If there is only one Drive Source (GL-13.5.1) and that Drive Source equals 'E' (Electric Motor), then Fuel Economy Value Unit (GL-90) must be 'KW-HR100' (kilowatt-hour per 100 miles).
GL-81	**Annual Fuel Cost (Calculated by Manufacturer)**	Enter the annual fuel cost for this FE Label using 15,000 miles of driving per year.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	AnnualFuelCostNumber	TRUE	~~1..3~~ 1 per Fuel Usage Value	N(5)							1	99999		Light Duty	FE Label		Mfr	Front End	XML		**Only one Annual Fuel Cost is allowed unless Fuel Usage Value = "Electricity"**
NEW GL-81.1	Annual Fuel Cost (Calculated by Verify)	The Verify calculated annual fuel cost for this FE Label using 15,000 miles of driving per year.			TRUE	1 per Fuel Usage Value	N(5)							1	99999			FE Label		Verify ~~Mfr~~	Backend ~~Front End~~	Assigned XML	New LD-FE-GL-BR108	Only one Annual Fuel Cost is allowed unless Fuel Usage Value = "Electricity"

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-91	**Mfr Unrounded Unadjusted Model Type City FE Value**	Provide the manufacturer calculated unrounded/ unadjusted Model Type city fuel economy value (not 5-cycle calculated values). ~~This value is required for all FE Label calculation approaches (except when Fuel Economy Calculation Approach (GL-79) = 'EV').~~	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerUnroundedUnadjustedModelTypeDetails	CityFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR019a** **Delete LD-FE-GL-BR019b**	~~Must be present if GL-89 (Fuel Usage) <>'PE' and <>'PE'; else, must not be present.~~
GL-92	**Mfr Unrounded Unadjusted Model Type Highway FE Value**	Provide the manufacturer calculated unrounded/ unadjusted Model Type highway fuel economy value (not 5-cycle calculated values). ~~This value is required for all FE Label calculation approaches (except when Fuel Economy Calculation Approach (GL-79) = 'EV').~~	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerUnroundedUnadjustedModelTypeDetails	HighwayFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR019a** **Delete LD-FE-GL-BR019b**	~~Must be present if GL-89 (Fuel Usage) <>'PE' and <>'PE'; else, must not be present.~~
GL-93	**Mfr Unrounded Unadjusted Model Type Combined FE Value**	Provide the manufacturer calculated unrounded/ unadjusted Model Type combined fuel economy value (not 5-cycle calculated values). ~~This value is required for all FE Label calculation approaches (except when Fuel Economy Calculation Approach (GL-79) = 'EV').~~	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerUnroundedUnadjustedModelTypeDetails	CombinedFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR019a** **Delete LD-FE-GL-BR019b**	~~Must be present if GL-89 (Fuel Usage) <>'PE' and <>'PE'; else, must not be present.~~
GL-94	**Mfr 5-Cycle Unrounded Adjusted Model Type City FE Value**	If the vehicle-specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type city fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerFiveCycleUnroundedAdjustedModelTypeDetails	CityFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR020a** **Delete LD-FE-GL-BR020b** **Delete LD-FE-GL-BR020c**	~~Must be present if GL-79 = '5C-DRV' or 'EV'; else, must not be present.~~

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-95	**Mfr 5-Cycle Unrounded Adjusted Model Type Highway FE Value**	specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type highway fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to the label-specified	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerFiveCycleUnroundedAdjustedModelTypeDetails	HighwayFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR020a** **Delete LD-FE-GL-BR020b** **Delete LD-FE-GL-BR020c**	~~Must be present if GL-79 <> 'SC-DRV' or 'EV'; else, must not be present.~~
GL-96	**Mfr 5-Cycle Unrounded Adjusted Model Type Combined FE Value**	If the vehicle specific 5-cycle label calculation approach is used to generate the FE Label, provide the manufacturer-calculated unrounded adjusted Model Type combined fuel economy value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall, but has not been rounded to	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerFiveCycleUnroundedAdjustedModelTypeDetails	CombinedFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR020a** **Delete LD-FE-GL-BR020b** **Delete LD-FE-GL-BR020c**	~~Must be present if GL-79 <> 'SC-DRV' or 'EV'; else, must not be present.~~
GL-97	**Mfr Calculated Rounded Adjusted Model Type City FE Value**	**Provide the manufacturer-calculated, rounded and adjusted Model Type city fuel economy value. This adjusted value reflects real-world driving and has been rounded to a whole number for label purposes.** **This value**	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerCalculatedRoundedAdjustedModelTypeDetails	CityFuelEconomyNumber	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR021a** **Delete LD-FE-GL-BR021b** **Delete LD-FE-GL-BR023** **New LD-FE-GL-BR104** **New LD-FE-GL-BR110** **New LD-FE-GL-BR111**	~~Must be present if GL-15 <> 'EV'.~~
GL-98	**Mfr Calculated Rounded Adjusted Model Type Highway FE Value**	**Provide the manufacturer-calculated, rounded and adjusted Model Type highway fuel economy value. This adjusted value reflects real-world driving and has been rounded to a whole number for label purposes.**	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerCalculatedRoundedAdjustedModelTypeDetails	HighwayFuelEconomyNumber	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR021a** **Delete LD-FE-GL-BR021b** **Delete LD-FE-GL-BR024** **New LD-FE-GL-BR104** **New LD-FE-GL-BR140** **New LD-FE-GL-BR141**	~~Must be present if GL-15 <> 'EV'.~~

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-99	**Mfr Calculated Rounded Adjusted Model Type Combined FE Value**	Provide the manufacturer-calculated, rounded and adjusted Model Type combined fuel economy value. This adjusted value reflects real world driving and has been rounded to a whole number for label	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerCalculatedRoundedAdjustedModelTypeDetails	CombinedFuelEconomyNumber	TRUE ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR021a** **Delete LD-FE-GL-BR021b** New LD-FE-GL-BR104 New LD-FE-GL-BR113a New LD-FE-GL-BR113b New LD-FE-GL-BR114	~~Must be present if GL-15 <> 'EV'.~~
GL-100	Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value ~~Mfr Voluntary Lower City FE Label Value~~	Enter the lower city FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type City FE Value' (GL-97).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerVoluntaryLowerDetails	CityFuelEconomyNumber	FALSE	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR104 New LD-FE-GL-BR109 New LD-FE-GL-BR110 New LD-FE-GL-BR111 **Delete LD-FE-GL-BR022a** **Delete LD-FE-GL-BR022b** **Delete LD-FE-GL-BR022c**	If Mfr Voluntary Lower MPG or Higher Energy Consumption Label Value (GL-85) is equal to 'No' then Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) is not allowed. If Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) is present and Fuel Economy Value Unit (GL-90) is equal to 'MPG' (miles per gallon) or 'MPK' (miles per kilometer) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) must be lower than Mfr Calculated Rounded Adjusted Model Type City FE Value (GL-97). If Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) is present and Fuel Economy Value Unit (GL-90) is equal to 'KW-HR100' (kilowatt-hour per 100 miles) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) must be greater than Mfr Calculated Rounded Adjusted Model Type City FE Value (GL-97). ~~GL-100 or GL-101 must be present if GL-85 = Yes; else, must not be present.~~ ~~If present, GL-100 must be less or equal to than GL-97 if Fuel Usage Type <> Electricity, otherwise it must be equal to or greater than GL-97.~~
GL-101	Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value ~~Mfr Voluntary Lower highway FE Label Value~~	Enter the lower highway FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type Highway FE Value' (GL-98).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerVoluntaryLowerDetails	HighwayFuelEconomyNumber	FALSE	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR022a** **Delete LD-FE-GL-BR022b** **Delete LD-FE-GL-BR022c** **Delete LD-FE-GL-BR024** New LD-FE-GL-BR104 New LD-FE-GL-BR139 New LD-FE-GL-BR140 New LD-FE-GL-BR141	If Mfr Voluntary Lower MPG or Higher Energy Consumption Label Value (GL-85) is equal to 'No' then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) is not allowed. If Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) is present and Fuel Economy Value Unit (GL-90) is equal to 'MPG' (miles per gallon) or 'MPK' (miles per kilometer) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) must be lower than Mfr Calculated Rounded Adjusted Model Type Highway FE Value (GL-98). If Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) is present and Fuel Economy Value Unit (GL-90) is equal to 'KW-HR100' (kilowatt-hour per 100 miles) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) must be greater than Mfr Calculated Rounded Adjusted Model Type Highway FE Value (GL-98). ~~GL-100 or GL-101 must be present if GL-85 = Yes; else, must not be present.~~ ~~If present, GL-101 must be less than or equal to GL-98 if Fuel Usage Type <> Electricity, otherwise it must be equal to or greater than GL-98.~~
GL-102	Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value ~~Mfr Voluntary Lower Combined FE Label Value~~	Enter the lower combined FE Label value if voluntarily using a lower MPG value or higher energy consumption value than was calculated and submitted for 'Mfr Rounded Adjusted Model Type Combined FE Value' (GL-99).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerVoluntaryLowerDetails	CombinedFuelEconomyNumber	FALSE	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer						0	999		Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR104 New LD-FE-GL-BR112 New LD-FE-GL-BR113 New LD-FE-GL-BR114 New LD-FE-GL-BR115 **Delete LD-FE-GL-BR025a** **Delete LD-FE-GL-BR025b**	If Mfr Voluntary Lower MPG or Higher Energy Consumption Label Value (GL-85) is equal to 'No' then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is not allowed. If Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is present and Fuel Economy Value Unit (GL-90) is equal to 'MPG' (miles per gallon) or 'MPK' (miles per kilometer) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) must be lower than Mfr Calculated Rounded Adjusted Model Type Combined FE Value (GL-99). If Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is present and Fuel Economy Value Unit (GL-90) is equal to 'KW-HR100' (kilowatt-hour per 100 miles) then Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) must be greater than Mfr Calculated Rounded Adjusted Model Type Combined FE Value (GL-99). If Manufacturer Voluntary Lower MPG or Higher Energy Consumption Combined Label Value (GL-102) is present then it must be greater than or equal to [1/(0.55/(City+0.5)+0.45/(Hwy+0.5))] rounded to a whole number AND less than or equal to [1/(0.55/(City+0.5)+0.45/(Hwy+0.5))] rounded to a whole number. Where: City = Manufacturer Voluntary Lower MPG or Higher Energy Consumption City Label Value (GL-100) if present, Mfr Calculated Rounded Adjusted Model Type City FE Value (GL-97) if not. Hwy = Manufacturer Voluntary Lower MPG or Higher Energy Consumption Highway Label Value (GL-101) if present, Mfr Calculated Rounded Adjusted Model Type Highway FE Value (GL-98) if not. ~~GL-102 must be present if GL-85 = Yes.~~ ~~The value for GL-102 must be the weighted average of the values for GL-100 and GL-101.~~ ~~GL-102 must be <= GL-99 if Fuel Usage Type <> Electricity, otherwise it must be >= GL-99.~~
GL-168	~~Manufacturer-calculated City Fuel Economy Label MPG~~ Lower Range Value	Enter the manufacturer-calculated city lower range value using the official city fuel economy label value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerCityLabelDetails	MilesPerGallonLowerRangeNumber	TRUE ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer	1	3				0	999	1-999	Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR026a** **Delete LD-FE-GL-BR026b**	~~Must be present if GL-15 <> 'EV'.~~
GL-169	~~Manufacturer-Calculated City Fuel Economy Label MPG~~ Upper Range Value	Enter the manufacturer-calculated city upper range value using the official city fuel economy label value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerCityLabelDetails	MilesPerGallonUpperRangeNumber	TRUE ~~FALSE~~	~~1..2~~ (1 per Fuel Usage value)	N(3)	Integer	1	3				0	999	1-999	Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR026a** **Delete LD-FE-GL-BR026b**	~~Must be present if GL-15 <> 'EV'.~~

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-170	Manufacturer-Calculated Highway Fuel Economy Label ~~MPG~~ Lower Range Value	Enter the manufacturer-calculated highway lower range value using the official ~~highway city~~ fuel economy label value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerHighwayLabelDetails	MilesPerGallonLowerRangeNumber	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(3)	Integer	1	3				0	999	1-999	Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR026a** **Delete LD-FE-GL-BR026b**	~~Must be present if GL-15 <> 'EV'.~~
GL-171	Manufacturer-Calculated Highway Fuel Economy Label ~~MPG~~ Upper Range Value	Enter the manufacturer-calculated highway upper range value using the official ~~highway city~~ fuel economy label value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails/ManufacturerHighwayLabelDetails	MilesPerGallonUpperRangeNumber	~~TRUE~~ ~~FALSE~~	~~1..1~~ (1 per Fuel Usage value)	N(3)	Integer	1	3				0	999	1-999	Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR026a** **Delete LD-FE-GL-BR026b**	~~Must be present if GL-15 <> 'EV'.~~
GL-103	**Model Type Driving Range** (EPA Method) (in miles)	driving range (minimum and maximum, if applicable) for this model type's fuel usage value following EPA guidance. This must be provided for all alternative fuels and also for models operated on gasoline or diesel if they are dual or bi-fuel. Do	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	ModelTypeDrivingRangeTxt	FALSE	~~1..1~~ (1 per Fuel Usage value)	A(20)	String	1	20	'nnn' = Single range; 'nnnnnnn' = Shortest and longest ranges for this model type that have availablle fuel tank capacities.					'nnn' = Single range 'nnnnnnn' = Shortest and longest ranges for this model type that have available multiple fuel tank capacities.	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR048 **New LD-FE-GL-BR116a, b** **Delete LD-FE-GL-BR027** **Delete LD-FE-GL-BR028**	~~Required if GL-15 = 'DF' or 'BF'.~~ ~~Required if GL-15 = 'SF' and the first character of GL-89 (SUBSTR(GL-89,1)) <> 'G' or 'D'.~~ **If only one value is selected for Fuel Usage (GL-89) and it begins with 'G' or "D" then EPA Model Type Driving Range (GL-103) is not allowed otherwise it is required for all Fuel Usage including gasoline and diesel.**
GL-104	**Maximum Ethanol Percentage**	Enter the maximum ethanol percentage recommended by the manufacturer.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	MaximumEthanolPercentageValue	FALSE	~~1..1~~ (1 per Fuel Usage value)	N(3.1)	Decimal				3	1	0	99.9		Light Duty	FE Label		Mfr	Front End	XML	**Update LD-FE-GL-BR029**	Required if GL-89 (Fuel Usage) = 'E' (Ethanol) **or one of the Fuel Usage Types that begins with 'G' (Gasoline)**; otherwise not allowed.
GL-105	**Maximum Bio-diesel Percentage**	Enter the maximum bio-diesel percentage recommended by the manufacturer.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails	MaximumBiodieselPercentageNumber	FALSE	~~1..1~~ (1 per Fuel Usage value)	N(3)	Integer				3	0	0	100		Light Duty	FE Label		Mfr	Front End	XML	**Update LD-FE-GL-BR030**	Required if GL-89 = ~~'D' or~~ 'DU', otherwise not allowed.
GL-106.1	**Certification Region Code**	Enter all applicable certification region codes for this FE Label. This was previously referred to as 'sales area' in CFEIS.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails	CertificationRegionCode	TRUE	1..2 (1 for each certification region code)	A(2)	Enumeration								CA = California + **CAA Section** 177 states FA = Federal	Light Duty	FE Label		Mfr	Front End	XML		
NEW GL-106.2	Actual Model Sales Area	Select all applicable US states and territories where this vehicle model is offered for sale.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails	ActualModelSalesAreaIdentifier	TRUE	1..n	A(2)	Enumeration								Display full list of all US states	Light Duty	FE Label	Manufacturers will select all that apply.	Mfr	Front End	XML		
~~GL-106.3~~	~~Footprint Index~~	~~Verify generated footprint index~~	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/ModelTypeFootprintDetails~~	~~FootprintIndexNumber~~	~~FALSE~~ ~~TRUE~~	~~1..n (1 for each footprint per FE Label.)~~	~~N(3)~~	~~Integer~~				~~2~~	~~0~~	~~1~~	~~99~~		~~Light Duty~~	~~FE Label~~	~~For web screens, Verify should automatically increment the index when mfr chooses to add another footprint. For batch, does the mfr need to enter?~~	~~Verify~~	~~Front End~~	~~XML~~		~~Required if Class Code (CL-5) >= '10', else optional.~~ ~~(note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).~~
~~GL-106.5~~	~~Model Type Footprint Description~~	~~Enter the manufacturer's model type and footprint description (e.g. "super cab, 4WD, long bed, Dodge"; "super cab, 2WD, short bed", etc.) . Repeat for each footprint within this model type index.~~	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/ModelTypeFootprintDetails~~	~~ModelTypeFootprintDescriptionText~~	~~FALSE~~ ~~TRUE~~	~~1..n (1 for each footprint per FE Label.)~~	~~A(300)~~	~~string~~	~~1~~	~~300~~							~~Light Duty~~	~~FE Label~~		~~Mfr~~	~~Front End~~	~~XML~~	Delete LD-FE-GL-BR031	~~Required if Class Code (CL-5) >= '10', else optional.~~ ~~(note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).~~

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-106.6	Wheel base (inches).	Enter the wheel base of this footprint for this model type measured in inches and rounded to one tenth of an inch.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeFootprintDetails	WheelBaseValue	FALSE TRUE	1..n (1 for each footprint per FE Label.)	N(6,1)	Decimal				6	1	0.1	9999.9		Light Duty	FE Label		Mfr	Front End	XML	Delete LD-FE-GL-BR031	Required if Class Code (CL-5) >= '10', else optional. (note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).
GL-106.7	Front Track Width (inches).	Enter the front track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeFootprintDetails	FrontTrackWidthValue	FALSE TRUE	1..n (1 for each footprint per FE Label.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE Label		Mfr	Front End	XML	Delete LD-FE-GL-BR031	Required if Class Code (CL-5) >= '10', else optional. (note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).
GL-106.8	Rear Track Width (inches).	Enter the rear track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeFootprintDetails	RearTrackWidthValue	FALSE TRUE	1..n (1 for each footprint per FE Label.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE Label		Mfr	Front End	XML	Delete LD-FE-GL-BR031	Required if Class Code (CL-5) >= '10', else optional. (note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).
NEW	Manufacturer Calculated Footprint (square feet)			FootprintAreaMeasure	TRUE	1..n (1 for each footprint per FE Label.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE Label		Mfr	Front End	XML		Required if Class Code (CL-5) >= '10', else optional. (note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).
GL-106.9	EPA Calculated Footprint (square feet)	The Verify calculated area of this footprint for this model type according to the footprint definition specified in 40 CFR 523.2.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeFootprintDetails	FootprintAreaMeasure	FALSE TRUE	1..n (1 for each footprint per FE Label.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE Label	Verify should calculate the footprint and display it on the front end using the following equation: Footprint = (((Front Track Width (GL-106.7) + Rear Track Width (GL-106.8)) / 2) * Wheelbase (GL-106.6)) / 144 rounded to one tenth of a square foot using ASTM rounding procedures. The result should then be stored on the back end. Any changes to GL-106.7, GL-106.8 or GL-106.6 should trigger a recalculation of this value.	Verify	Back End	Assigned		Required if Class Code (CL-5) >= '10', else optional. (note: Use the Carline Code in GL-13 to look up the Class Code in CL-5).
GL-107	**Commerce Introduction Date**	Enter the date on which this Model Type will be entered into commerce.			TRUE	1 per FE Label	D(8)	Date									Light Duty	FE Label	This field is derived from Cert data by matching Testgroup (GL-13.5). CR-7.	Verify	Back End	Pre-existing data		
GL-108																								
	Base Level Info (Multiple Base Levels may exist within a FE Label Model Type)															**Base Level is defined as a "unique combination of Basic Engine, Transmission Class and Inertia Weight Class"**								
GL-109	**Base Level Index**	Assigned by Verify for each base level (i.e. inertia weight class) created by the manufacturer.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails	BaseLevelIndexNumber	TRUE	1..n (1 for each Base Level within a Model Type)	N(2)	Integer						1	99		Light Duty	FE Label	Assigned by Verify as a sequential incrementer for each base level (i.e. inertia weight class) entered by the mfr. Data elements GL-110 through GL-116 make this a repeating dataset.	Verify	Front End	XML		
GL-110	**Inertia Weight Class**	Inertia Weight Class (ref: 40 CFR 600.002-08): means the class, which is a group of test weights, into which a vehicle is grouped based on is loaded vehicle weight in accordance with the provisions of 40 CFR 86.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails	InertiaWeightClassNumber	TRUE	1..n (1 for each Base Level within a Model Type)	N(5)	Integer						0	99999		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR052 LD-FE-GL-BR063 LD-FE-GL-BR064 LD-FE-GL-BR065 LD-FE-GL-BR066 LD-FE-GL-BR067 LD-FE-GL-BR068 LD-FE-GL-BR069 LD-FE-GL-BR070 LD-FE-GL-BR071 LD-FE-GL-BR072 LD-FE-GL-BR073 LD-FE-GL-BR074 LD-FE-GL-BR075 LD-FE-GL-BR076 LD-FE-GL-BR077	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-110.5	**Base Level Fuel Usage ID**	Enter the applicable fuel used for this base level.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails	FuelUsageIdentifier	TRUE	1..n (1 for each Base Level within a Model Type)	A(3)	Enumeration								G = Gasoline (Regular Unleaded Recommended) GM = Gasoline (Mid Grade Unleaded Recommended) GMR = Gasoline (Mid Grade Unleaded Required) GP = Gasoline (Premium Unleaded Recommended) GPR = Gasoline (Premium Unleaded Required) D = Diesel, low sulfur (500 ppm) (obsolete after MY2006), DU = Diesel, ultra low sulfur (15 ppm, maximum) M = Methanol E = Ethanol (E85) CNG = Compressed Natural Gas LNG = Liquefied Natural Gas LPG = Liquid Petroleum Gas H = Hydrogen EL = Electricity BE = Battery Electric PE= Plug-in Hybrid Electric	Light Duty	FE Label	Existing values of 'D' (Diesel, low sulfur (500 ppm)) are valid.	Mfr	Front End	XML	LD-FE-GL-BR049 LD-FE-GL-BR092 LD-FE-GL-BR094 LD-FE-GL-BR095 LD-FE-GL-BR096	
GL-111	**Manufacturer-Calculated Unrounded Unadjusted Base Level City FE Value**	Provide the manufacturer-calculated unrounded/ unadjusted Base Level City FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerUnroundedUnadjustedBaseLevelDetails	CityFuelEconomy4Value	TRUE FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Mfr	Front End	XML	**Delete LD-FE-GL-BR032a** **Delete LD-FE-GL-BR032b**	Must be present if GL-89 (fuel usage) <> 'BE' and <> 'PE'; else, must not be present.
GL-112	**Manufacturer-Calculated Unrounded Unadjusted Base Level Highway FE Value**	Provide the manufacturer-calculated unrounded/ unadjusted Base Level Highway FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerUnroundedUnadjustedBaseLevelDetails	HighwayFuelEconomy4Value	TRUE FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Mfr	Front End	XML	**Delete LD-FE-GL-BR032a** **Delete LD-FE-GL-BR032b**	Must be present if GL-89 (fuel usage) <> 'BE' and <> 'PE'; else, must not be present.
GL-113	**Manufacturer-Calculated Unrounded Unadjusted Base Level Combined FE Value**	Provide the manufacturer-calculated unrounded/ unadjusted Base Level Combined FE value (using derived 5-Cycle calculation method). This value is not rounded and not adjusted for the real world fuel economy shortfall.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerUnroundedUnadjustedBaseLevelDetails	CombinedFuelEconomy4Value	TRUE FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Mfr	Front End	XML	**Delete LD-FE-GL-BR032a** **Delete LD-FE-GL-BR032b**	Must be present if GL-89 (fuel usage) <> 'BE' and <> 'PE'; else, must not be present.
NEW GL-113.5	EPA-Calculated Unrounded Unadjusted Base Level City FE Value	Verify- calculated unrounded unadjusted base level City fuel economy value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/CalculatedUnadjustedUnroundedModelTypeDetails	CityFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Verify	Back End	Assigned		
NEW GL-113.6	EPA-Calculated Unrounded Unadjusted Base Level Highway FE Value	Verify- calculated unrounded unadjusted base level Highway fuel economy value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/CalculatedUnadjustedUnroundedModelTypeDetails	HighwayFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Verify	Back End	Assigned		
NEW GL-113.7	EPA-Calculated Unrounded Unadjusted Base Level Combined FE Value	Verify- calculated unrounded unadjusted base level Combined fuel economy value.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/CalculatedUnadjustedUnroundedModelTypeDetails	CombinedFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	This would be a required field if the same fields are used for electric vehicles.	Verify	Back End	Assigned		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-114	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Base Level City FE Value**	If the vehicle-specific 5-cycle label calculation approach is used to generate this FE Label, provide the manufacturer-calculated unrounded adjusted Base Level city FE value. This value has been	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerFiveCycleUnroundedAdjustedBaseLevelDetails	CityFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR033a, Delete LD-FE-GL-BR033b, Delete LD-FE-GL-BR033c**	~~Must be present if GL-79 = 'SC-VEHSPEC', 'SC-MOD', or 'EV-SC'; otherwise optional.~~ ~~Must be present if GL-79 <> 'SC-DRV' or 'EV'; else, must not be present.~~
GL-115	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Base Level Highway FE Value**	specific 5-cycle label calculation approach is used to generate this FE Label, provide the manufacturer-calculated unrounded adjusted Base Level highway FE value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall and has not been rounded to the label-specified	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerFiveCycleUnroundedAdjustedBaseLevelDetails	HighwayFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR033a Delete LD-FE-GL-BR033b Delete LD-FE-GL-BR033c**	~~Must be present if GL-79 = 'SC-VEHSPEC', 'SC-MOD', or 'EV-SC'; otherwise optional.~~ ~~Must be present if GL-79 <> 'SC-DRV' or 'EV'; else, must not be present.~~
GL-116	**Manufacturer-Calculated 5-Cycle Unrounded Adjusted Base Level Combined FE Value**	specific 5-cycle label calculation approach is used to generate this FE Label, provide the manufacturer-calculated unrounded adjusted Base Level combined FE value. This value has been adjusted using the 5-cycle method for the real-world driving shortfall and has not been rounded to the label-specified	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/FuelUsageDetails/ManufacturerFiveCycleUnroundedAdjustedBaseLevelDetails	CombinedFuelEconomy4Value	~~TRUE~~ ~~FALSE~~	**1..n (1 for each Fuel Usage for each Base Level within a Model Type)**	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Mfr	Front End	XML	**Delete LD-FE-GL-BR033a Delete LD-FE-GL-BR033b Delete LD-FE-GL-BR033c**	~~Must be present if GL-79 = 'SC-VEHSPEC', 'SC-MOD', or 'EV-SC'; otherwise optional.~~ ~~Must be present if GL-79 <> 'SC-DRV' or 'EV'; else, must not be present.~~
NEW GL-116.5	EPA-Calculated 5-Cycle Unrounded Adjusted Base Level City FE Value	~~Verify-~~ calculated 5-cycle unrounded adjusted base level	~~FuelEconomyLabelSubmission/~~FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/FiveCycleAdjustedUnroundedModelType	CityFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Verify	Back End	Assigned		
NEW GL-116.6	EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Highway FE Value	~~Verify-~~ calculated 5-cycle unrounded adjusted base level	~~FuelEconomyLabelSubmission/~~FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/FiveCycleAdjustedUnroundedModelType	HighwayFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Verify	Back End	Assigned		
NEW GL-116.7	EPA-Calculated 5-Cycle Unrounded Adjusted Base Level Combined FE Value	Verify-calculated 5-cycle unrounded adjusted base level combined fuel economy value	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails/FiveCycleAdjustedUnroundedModelType Details	CombinedFuelEconomy4Value	FALSE	1..n (1 for each Fuel Usage for each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label		Verify	Back End	Assigned		
	Configuration Info (Multiple Configurations may exist within a Base Level)															**Configuration is defined as a "unique combination of Engine Code, Axle Ratio and Transmission Configuration within a Base Level"**								

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-117	**Configuration Index**	index number assigned by the manufacturer to identify each configuration within a Base Level that contains a unique combination of Engine Code, Axle Ratio and Transmission Configuration. Manufacturers should assign the code as specified below: 001-499: A	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails	ConfigurationIndexNumber	TRUE	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3)	Integer				3	0	1	999		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR036a LD-FE-GL-BR036b LD-FE-GL-BR036c LD-FE-GL-BR036d LD-FE-GL-BR053	
GL-118	**Transmission Configuration Code**	Transmission Configuration Code assigned by the manufacturer for this Configuration. 1. The Transmission Configuration Code is used to distinguish a unique transmission configuration within a Transmission Class. Manufacturers may assign the code alphanumer	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails	TransmissionConfigurationCode	TRUE	1..n (1 for each Configuration within each Base Level within a Model Type)	A(2)	String	1	2	[A-Z0-9]{1,2}						Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055	
GL-119	**Engine Code**	Enter the Engine Code for this Configuration which is used to distinguish a unique combination of displacement, fuel delivery system, calibration, emission control, ... within a Engine system combination (ref: 40 CFR 600.002-08).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails	EngineCodeText	TRUE	~~1..n~~ (1 for each Configuration within each Base Level within a Model Type)	A(14)	String	1	14							Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055	
GL-120	**Axle Ratio**	Enter the axle ratio for this Configuration.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails	AxleRatioValue	TRUE	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3,2)	Decimal				3	2	0.00	9.99		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR055	
GL-120.1	EPA-Calculated Unrounded Unadjusted Configuration City FE Value	Verify- calculated unrounded unadjusted configuration city fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationUnadjustedUnroundedDetails	CityFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-120.2	EPA-Calculated Unrounded Unadjusted Configuration Highway FE Value	Verify- calculated unrounded unadjusted configuration highway fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationUnadjustedUnroundedDetails	HighwayyFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-120.3	EPA-Calculated Unrounded Unadjusted Configuration Combined FE Value	Verify- calculated unrounded unadjusted configuration combined fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationUnadjustedUnroundedDetails	CombinedFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-120.4	EPA-Calculated 5-cycle Unrounded Adjusted Configuration City FE Value	Verify-calculated 5-cycle unrounded adjusted configuration city fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationFiveCycleAdjustedUnroundedDetails	CityFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-120.5	EPA-Calculated 5-cycle Unrounded Adjusted Configuration Highway FE Value	Verify-calculated 5-cycle unrounded adjusted configuration highway fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationFiveCycleAdjustedUnroundedDetails	HighwayFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-120.6	EPA-Calculated 5-cycle Unrounded Adjusted Configuration Combined FE Value	Verify-calculated 5-cycle unrounded adjusted configuration combined fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:ConfigurationFiveCycleAdjustedUnroundedDetails	CombinedFuelEconomy4Value	FALSE ~~TRUE~~	1..n (1 for each Configuration within each Base Level within a Model Type)	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
	Sub-configuration Info (Multi subconfigurations may exist within a Configuration)							A sub-configuration is defined as a unique combination of equivalent test weight, and road-load horse power, etc. within a configuration.																
GL-121	**Subconfiguration Index**	Index number assigned by the manufacturer to identify this subconfiguration within a configuration. Subconfiguration Index is used to identify each subconfiguration within a configuration that contains a unique combination of equivalent test weight and road load horse power.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	SubConfigurationIndexNumber	TRUE	ضبط (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer				2		1	99		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR054	
GL-122	**Total Road Load Horsepower**	Enter the total road load horsepower at 50 mph (TRLHP50).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	RoadLoadHorsepowerValue	TRUE	ضبط (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,1)	Decimal				3	1	0	99.9		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR056	
GL-123	**Equivalent Test Weight (ETW)**	Enter the Equivalent Test Weight (ETW) within a specified Inertia Weight Class.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	EquivalentTestWeightValue	TRUE	ضبط (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5)	Enumeration	1	5				0	14000	1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR056 LD-FE-GL-BR062	Must be a valid Equivalent Test Weight (ETW) within a specified Inertia Weight Class as defined in paragraph 40 CFR 86.129
GL-125	**Altitude Code**	Enter the altitude for which the vehicles within this subconfiguration are offered for sale.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	SaleAltitudeCode	TRUE	ضبط (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								A = All altitude L = Low altitude only H = High altitude only	Light Duty	FE Label		Mfr	Front End	XML		
GL-125.0.1	EPA-Calculated Unrounded Unadjusted Subconfiguration City FE Value	Verify-calculated unrounded unadjusted subconfiguration city fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationUnadjustedUnroundedDetails	CityFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-125.0.2	EPA-Calculated Unrounded Unadjusted Subconfiguration Highway FE Value	Verify-calculated unrounded unadjusted subconfiguration highway fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationUnadjustedUnroundedDetails	HighwayFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-125.0.3	EPA-Calculated Unrounded Unadjusted Subconfiguration Combined FE Value	Verify-calculated unrounded unadjusted subconfiguration combined fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationUnadjustedUnroundedDetails	CombinedFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-125.0.4	EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration City FE Value	Verify-calculated 5-cycle unrounded uadjusted subconfiguration city fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationFiveCycleAdjustedUnroundedDetails	CityFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-125.0.5	EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration Highway FE Value	Verify-calculated 5-cycle unrounded uadjusted subconfiguration highway fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationFiveCycleAdjustedUnroundedDetails	HighwayFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
GL-125.0.6	EPA-Calculated 5-cycle Unrounded Adjusted Subconfiguration Combined FE Value	Verify-calculated 5-cycle unrounded uadjusted subconfiguration combined fuel economy value.	ver:FuelEconomyLabelSubmission/ver:FuelEconomyLabelDetails/ver:EPAGeneratedFuelEconomyDetails/ver:CalculatedFuelUsageAndEconomyDetails/ver:CalculatedBaseLevelDetails/ver:CalculatedConfigurationDetails/ver:CalculatedSubConfigurationDetails/ver:SubConfigurationFiveCycleAdjustedUnroundedDetails	CombinedFuelEconomy4Value	FALSE	1 for each Subconfiguration within each Configuration within each Base Level within each Model Type	N(7,4)	Decimal				7	4	0	999.9999		Light Duty	FE Label	These fields already exist in the Verify database but were not included in the data requirements spreadsheet	Verify	Back End	Assigned		
	Sub-configuration Sales Info (Multiple Subconfiguration-sales may exist within a Subconfiguration)															A sub-configuration is defined as a unique combination of equivalent test weight, and road-load horse power, etc. within a configuration.								
GL-125.5	Manufacturer Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesInformationDetails	EPAManufacturerCode	TRUE	~~1..n~~ (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(3)	String	3	3	[A-Z0-9]{3}									Verify	Front End	XML	LD-FE-GL-BR059 New LD-FE-GL-BR117	
GL-125.6	Division Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesInformationDetails	ManufacturerDivisionCode	TRUE	~~1..n~~ (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer	1	2				1	99					Manufacturer	Front End	XML	LD-FE-GL-BR060 New LD-FE-GL-BR098 New LD-FE-GL-BR117	
GL-125.7	Carline Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesInformationDetails	CarlineCode	TRUE	~~1..n~~ (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3)	Integer	1	3				1	999					Mfr	Front End	XML	LD-FE-GL-BR061 New LD-FE-GL-BR098 New LD-FE-GL-BR117	NEW: The combination of Carline Manufacturing Code (GL-125.5), Division Code (GL-125.6), Carline Code (GL-125.7), Transmission Type (GL-67), Transmission Lockup (GL-69), Transmission Creeper Gear (GL-70), Total Number of Transmission Gears (GL-71), and Drive System (GL-72) must exist as a certified model in the Test Group dataset (TG) for the Test Group (GL-126).
GL-126	**Test Group**	Enter the applicable test group name for this subconfiguration.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesInformationDetails	TestGroupName	TRUE	~~1..n~~ (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type) ~~1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)~~	A(12)	String	12	12									Light Duty	FE Label	TG-2	Mfr	Front End	XML	LD-FE-GL-BR034 New LD-FE-GL-BR119 New LD-FE-GL-BR118	TestGroup must have already been certified. If Fuel Economy Label Calculation Approach (GL-79) is equal to '5C-MOD' (Modified 5-cycle) then Test Group (GL-126) must have valid values (non-Null) for EPA City Litmus Value (TG-219.3.1) and EPA City Litmus Threshold (TG-219.3.2), and EPA City Litmus Value (TG-219.3.1) must be greater than or equal to EPA City Litmus Threshold (TG-219.3.2). If Fuel Economy Label Calculation Approach (GL-79) is equal to '5C-DRV' (Derived 5-cycle) then Test Group (GL-126) must have valid values (non-Null) for EPA City Litmus Value (TG-219.3.1), EPA City Litmus Threshold (TG-219.3.2), EPA Highway Litmus Value (TG-219.4.1), and EPA Highway Litmus Threshold (TG-219.4.2), and EPA City Litmus Value (TG-219.3.1) must be greater than or equal to EPA City Litmus Threshold (TG-219.3.2), and EPA Highway Litmus Value (TG-219.4.1) must be greater than or equal to EPA Highway Litmus Threshold (TG-219.4.2).
GL-124	**Subconfiguration Projected Sales**	Enter the projected sales for this subconfiguration.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesInformationDetails	SubConfigurationProjectedSalesNumber	TRUE	~~1..n~~ (1 for each Subconfiguration sales row within each Subconfiguration within each Configuration within each Base Level within each Model Type) ~~1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)~~	N(6)	Integer						1	999999		Light Duty	FE Label		Mfr	Front End	XML		Must <> 0.
	Test Vehicle Info (Multiple vehicles with multiple tests may exist within a sub-configuration)																		**Must be present when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle; otherwise, must not present.**					**Must be present when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle; otherwise, must not present.**

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-127	**Test Number**	applicable Test Number for this FE Label that was previously assigned by Verify in Test Information. Test Number must be entered when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	TestNumberIdentifier	FALSE ~~TRUE~~	1..n (1 ..n for each ~~Test within each~~ Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String								Light Duty	FE Label	TI-1	Mfr	Front End	XML	LD-FE-GL-BR035 LD-FE-GL-BR036a LD-FE-GL-BR036b LD-FE-GL-BR036c LD-FE-GL-BR036d LD-FE-GL-BR037a LD-FE-GL-BR037b LD-FE-GL-BR051 LD-FE-GL-BR057 LD-FE-GL-BR078 LD-FE-GL-BR079 LD-FE-GL-BR087 New LD-FE-GL-BR124 New LD-FE-GL-BR125 New LD-FE-GL-BR126 New LD-FE-GL-BR127 New LD-FE-GL-BR128 New LD-FE-GL-BR129 New LD-FE-GL-BR130 New LD-FE-GL-BR131 New LD-FE-GL-BR132 New LD-FE-GL-BR142 New LD-FE-GL-BR143	Test Number must exist in Verify Test Info. Test Number must be present when Subconfiguration Index (GL-121) is 1 to 49 and Configuration Index (GL-117) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle. Test Category for this Test Number must = 'FTP', 'US06', 'SC03', 'COLD' or 'HWY'.
GL-128	**Vehicle ID**	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle.			TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(20)	String	1	20							Light Duty	FE Label	Find 'Vehicle ID' (TI-4) via Test Number (GL-127). TI-4 --> VI-2	Verify	Back End	Pre-existing data	New LD-FE-GL-BR120	
GL-129	**Vehicle Configuration Number**	A number previously assigned to specify a unique test vehicle configuration.			TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer						0	99		Light Duty	FE Label	Find 'Vehicle Configuration Number' (TI-5) via Test Number (GL-127). TI-5 --> VI-3	Verify	Back End	Pre-existing data	New LD-FE-GL-BR120	The Vehicle ID (GL-128) and Vehicle Configuration Number (GL-129) combination must have associated Test Procedure Dynamometer Coefficients Category (VI-40.5) equal to "C-H-E" (City/Highway/Evap).
GL-130	**Test Category**	The applicable test category for this test.			TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(6)	Enumeration								FTP = Federal Test Procedure US06 = US06 SC03 = SC03 HWY = Highway NOx EVAP = Evaporative ~~COLD = Cold CO~~ SPIT = Spitback ORVR = On-board Refueling Vapor Recovery NCNHE = Non-City, Non-Highway Exhaust URBRNG = Urban Range HWYRNG = Highway Range AC-IDLE = A/C Idle Test CD = Charge Depleting	Light Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. EVAP = 23, 27, 34, 38, 43, 47 FTP = 2, 11, 21, 25, 31, 35, 41, 45, 51, 52 HWY = 3 HWYRNG = 63 NCNHE = 10, 72, 76 ORVR = 24, 32, 37, 44 SC03 = 95 SPIT = 15 URBRNG = 62 US06 = 90 A/C Idle = 87, 88 Charge Depleting = 81, 82, 83	Verify	Back End	Pre-existing data		
NEW: GL-130.2	Test Fuel Category	This field will automatically be filled based on the Test Fuel Category (TI-44) in Test Information)			TRUE	1 per test fuel type	A(3)	Enumeration								~~EL~~ EL = Electricity CNG = Natural Gas D = Diesel E = Ethanol G = Gasoline H = Hydrogen LPG = LPG M = Methanol	Light Duty	Test Group	~~EL~~ EL = 62 CNG = 10, 41 D = 9, 19 E = 36, 37, 38, 43, 44, 45, 71 G = 1, 6, 7, 8, 22, 23, 24, 25, 26, 27, 61 H = 50 LPG = 42 M = 31, 32, 33, 34	Verify	Backend	Pre-existing data		
NEW: GL-130.5	Test 5-Cycle Category				TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(5)	Enumeration								FTP75 = Federal Test Procedure (75 °F) FTP20 = Federal Test Procedure (20 °F) US06 = US06 SC03 = SC03 HWY = Highway Nox	Light Duty	Certification Test Data	This field will automatically be filled based on the test procedure (in "Test" section) associated with the test number. A valid test number is required for these test categories. FTP75 = 2, 21, 25, 31, 35, 41, 45 FTP20 = 11 HWY = 3 SC03 = 95 US06 = 90	Verify	Back End	Pre-existing data	New LD-FE-GL-BR121 New LD-FE-GL-BR122 New LD-FE-GL-BR123	NEW: Test 5-Cycle Category (GL-130.5) cannot be equal to "Null" NEW: If Fuel Economy Label Calculation Approach (GL-79)="5C-DRV" then Test 5-Cycle Category (GL-130.5) must equal "FTP75" or "HWY", all other enumerations (including Null) are not allowed. NEW: If Fuel Economy Label Calculation Approach (GL-79)="5C-MOD" then Test 5-Cycle Category (GL-130.5) must equal "FTP75", "HWY", or "US06", all other enumerations (including Null) are not allowed. NEW: If Test Fuel Category (GL-130.2)="E","M","H", or "EL" and Test 5-Cycle Category (GL-130.5) ="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name (TI-19) equal to "MFR FE". NEW: If Fuel Economy Label Calculation Approach (GL-79)="5C-DRV" and Test 5-Cycle Category (GL-130.5)="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name (TI-19) equal to "MFR FE". NEW: If Test Fuel Category (GL-130.2)="G","D","CNG",or "LPG" and Fuel Economy Label Calculation Approach (GL-79)="5C-VEHSPEC" or "5C-MOD" and Hybrid Indicator (GL-13.5) ="No" and Test 5-Cycle Category (GL-130.5)="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3". (Test Result/Emission Name "FE BAG 4" is not allowed).

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
NEW: GL-130.5	Test 5-Cycle Category-Continued	A valid test number is required for these fuel categories.																						NEW: If Test Fuel Category (GL-130.2)="G","D","CNG",or "LPG" and Fuel Economy Label Calculation Approach (GL-79)="5C-VEHSPEC" or "5C-MOD" and Hybrid Indicator (GL-13.5) ="No" and Test 5-Cycle Category (GL-130.5)="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", "FE BAG 2", and "FE BAG 3". (Test Result/Emission Name "FE BAG 4" is not allowed). NEW: If Test Fuel Category (GL-130.2)="G","D","CNG",or "LPG" and Fuel Economy Label Calculation Approach (GL-79)="5C-VEHSPEC" or "5C-MOD" and Hybrid Indicator (GL-13.5) ="Yes" and 5 Cycle Hybrid Fuel Economy Label Calculation Approach (GL-79.1)="HEV-2B" and Test 5-Cycle Category (GL-130.5)="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", and "FE BAG 2". (Test Result/Emission Name(s) "FE BAG 3", and "FE BAG 4" are not allowed). NEW: If Test Fuel Category (GL-130.2)="G","D","CNG",or "LPG" and Fuel Economy Label Calculation Approach (GL-79)="5C-VEHSPEC" or "5C-MOD" and Hybrid Indicator (GL-13.5) ="Yes" and 5 Cycle Hybrid Fuel Economy Label Calculation Approach (GL-79.1)="HEV-4B" and Test 5-Cycle Category (GL-130.5)="FTP75" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", "FE BAG 2", "FE BAG 3", and "FE BAG 4".
NEW: GL-130.5	Test 5-Cycle Category-Continued																							NEW: If Test 5-Cycle Category (GL-130.5)="HWY" Then Test Number (GL-127) must have associated Test Result/Emission Name (TI-19) equal to "MFR FE". (Test Result/Emission Name(s) "FE BAG 1", "FE BAG 2", "FE BAG 3", and "FE BAG 4" are not allowed). NEW: If Fuel Economy Label Calculation Approach (GL-79)="5C-VEHSPEC" and Test Economy Category (GL-130.1)="US06" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", and "FE BAG 2". (Test Result/Emission Name(s) "FE BAG 3", and "FE BAG 4" are not allowed). NEW: If Fuel Economy Label Calculation Approach (GL-79)="5C-MOD" and Test 5-Cycle Category (GL-130.5)="US06" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "MFR FE", "FE BAG 1", and "FE BAG 2". (Test Result/Emission Name(s) "FE BAG 3", and "FE BAG 4" are not allowed). NEW: If Test 5-Cycle Category (GL-130.5)="FTP20" Then Test Number (GL-127) must have associated Test Result/Emission Name(s) (TI-19) equal to "FE BAG 1", "FE BAG 2" and "FE BAG 3". (Test Result/Emission Name "FE BAG 4" is not allowed). NEW: If Test 5-Cycle Category (GL-130.5)="SC03" Then Test Number (GL-127) must have associated Test Result/Emission Name (TI-19) equal to "MFR FE". (Test Result/Emission Name(s) "FE BAG 1", "FE BAG 2", "FE BAG 3", and "FE BAG 4" are not allowed).
GL-131	**Analytically-Derived FE / CREE ~~(ADFE)~~ Indicator**	Is this test analytically derived?			TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N=No Y=Yes	Light Duty	FE Label	The fuel economy values for this vehicle that represent a sub-configuration were generated by an EPA-approved analytically-derived method, in lieu of testing (ref: 40 CFR 600.006(e) and CCD-04-06). Notes: 1. # of ADFE must be no more than 20% of the subconfigurations tested 2. May not use any ADFE with a combined FE of less than 1.0 mpg above the gas Guzzler Tax $0 threshold (currently, 23.5 mpg) 3. May not use any ADFE with a combined fuel economy >= the leader in the applicable Carline class based on the previous model year's unadjusted general label values rounded to a whole mpg. TI-13.5	Verify	Back End	Pre-existing data	New LD-FE-GL-BR133	NEW: If the Total Road Load Horsepower (GL-122) is greater than the tested vehicles' EPA-Calculated Total Road Load Horsepower (VI-43.5), or the Equivalent Test Weight (ETW) (GL-123) is greater than the tested vehicles' ETW (VI-30), or the axle ratio (GL-120) is greater than the tested vehicles' axle ratio then Analytically-Derived FE / CREE Indicator (GL-131) must be equal to "Yes".
GL-132	**Data Substitution Indicator**	Enter the applicable Data Substitution Indicator for this test.	FuelEconomyLabelSubmission/FuelEconomyLabelDetailsAndCodeTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	DataSubstitutionIndicator	TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR079 New LD-FE-GL-BR134 New LD-FE-GL-BR135	NEW: If the Analytically-Derived FE / CREE Indicator (GL-131) is equal to "No" and [Total Road Load Horsepower (GL-122) is less than the tested vehicles' EPA-Calculated Total Road Load Horsepower (VI-43.5), or the Equivalent Test Weight (ETW) (GL-123) is less than the tested vehicles' ETW (VI-30), or the axle ratio (GL-120) is less than the tested vehicles' axle ratio] then Data substitution Indicator (GL-132) must be equal to "Yes". NEW: If the Analytically-Derived FE / CREE Indicator (GL-131) is equal to "Yes" then the Data Substitution Indicator (GL-132) must be equal to "No".
GL-133	**Averaging Method**	Averaging Method to be used if this Test Number is part of an averaging group (i.e. subconfiguration equipped with a multi-mode transmission or Shift Indicator Light), where: N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i)	FuelEconomyLabelSubmission/FuelEconomyLabelDetailsAndCodeTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingMethodIdentifier	TRUE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i)))	Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR079 LD-FE-GL-BR088 LD-FE-GL-BR089 LD-FE-GL-BR090 New LD-FE-GL-BR136	If Model Year (GL-3) is greater than or equal to 2011, then 'S' (Simple averaging) is not allowed.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
GL-134	**Averaging Group Indicator**	Enter the Averaging Group Indicator assigned by the manufacturer that will be used to identify all the tests (of the same test procedure) that need to be averaged together.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingGroupIndicator	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	String	1	1	[A-Z0-9]						Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR038 LD-FE-GL-BR080 LD-FE-GL-BR081 LD-FE-GL-BR082 LD-FE-GL-BR083 LD-FE-GL-BR084 LD-FE-GL-BR086 LD-FE-GL-BR091	Must not be entered if Averaging Method (GL-133) = 'N'.
GL-135	**Averaging Weighting Factor**	Enter the averaging weighting factor for this vehicle mpg if equipped with either Shift Indicator Light (SIL) or multi-mode transmission. (Formerly 'Test Group Weighting' in CFEIS).	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingWeightingFactorValue	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,2)	Decimal				3	2	0.01	0.99		Light Duty	FE Label		Mfr	Front End	XML	LD-FE-GL-BR039 LD-FE-GL-BR085 LD-FE-GL-BR090 LD-FE-GL-BR091	Must be present if Averaging Method (GL-133) <> 'N'.
GL-136	**EPA FE Label Comments**	EPA only: Enter any additional comments regarding the FE Label for this Model Type.		ManufacturerCommentText	FALSE	1 per FE Label	A(1000)	String	1	1000							Light Duty	FE Label		EPA	Back End	Assigned		
GL-106	**Gas Guzzler Exempt**	Is this FE Label exempt from IRS Gas Guzzler regulations?	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/ModelTypeDetails	GasGuzzlerExemptionIdentifier	TRUE	1 per FE Label	A(1)	Enumeration								N - Not exempt T - Truck *(already in database?)* 1 - Unloaded GVWR > 6000 lbs (not applicable to limousines) 2 - Emergency Vehicle 3 - IRS Alternative Rate Schedule ~~4 - Small volume manufacturer who lengthens an existing vehicle~~ 5 - Vehicle can not operate on gasoline or diesel fuel	Light Duty	FE Label		Mfr	Front End	XML	New LD-FE-GL-BR137	**If "T" (truck) is selected, Carline Class Code for entered Carline Code must be > '9' and < 24**
GL-173	**EPA-Calculated Gas Guzzler Mile Per Gallon**	Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails	GasGuzzlerMilesPerGallonValue	FALSE	1	N(4,1) ~~N(3,1)~~	Decimal				4 ~~3~~	1	0	999.9 ~~99.9~~		Light Duty	FE Label	Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.	Verify	Back End	Assigned		1. Only applicable to passenger vehicle (see Vehicle Class Table)
NEW GL-173.1	**Manufacturer-Calculated Gas Guzzler Mile Per Gallon**	**Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.**	**FuelEconomyLabelSubmission/FuelEconomyLabelDetails/FuelUsageAndEconomyDetails**	**ManufacturerGasGuzzlerMPGValue**	**FALSE**	**1**	**N(4,1)**	**Decimal**				**4**	**1**	**0**	**999.9**		**Light Duty**	**FE Label**	**Calculate model type mpg for gas guzzler indication as specified in 40 CFR 600.513 for each passenger automobile model type.**	**Manufacturer**	**Front End**	**XML**	**New LD-FE-GL-BR138**	**1. Only applicable to passenger vehicle (see Vehicle Class Table)** **Required if Gas Guzzler Exempt = N (not exempt)**
GL-174	**Gas Guzzler Indicator**	**Verify-calculated field that** indicates this model type is a gas guzzler (see guzzler comparison value set forth in the Gas Guzzler Table, updated each model year)	FuelEconomyLabelSubmission/FuelEconomyLabelDetails/EPAGeneratedFuelEconomyDetails/CalculatedFuelUsageAndEconomyDetails	GasGuzzlerIndicator	TRUE	1	A(1)	string	1	1						Y = Yes N = No	Light Duty	FE Label	Comparing "GasGuzzlerMPG" with the Gas Guzzler Table, indicates "G" for those model type that meets the gas guzzler criteria for that model year. (note: A reminder email should be sent to the EPA FE lead person on Jan. 2 each year for the Gas Guzzler Table review and update.)	Verify	Back End	Assigned		1. Only applicable to passenger vehicle 2. only if the guzzler criteria meet
EPA Entered Fuel Cost Fields																								

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
NEW GL-175	Fuel Cost (for each fuel usage type)	Verify table that stores the fuel cost for each fuel usage type for each model year that is entered by EPA to calculate annual fuel costs for each fuel economy label.			TRUE	1 for each Fuel Usage Type in Verify Table	N(6,2)	Decimal				6	2		9999.99	These are database only fields. This is the table used to perform EPA fuel cost calculations in GL-81.1 (to verify mfr's calculated annual fuel cost). The new model year uses the previous model year's fuel cost values until EPA determines and enters new updated fuel cost values.	Light Duty	FE Label	These fields are entered by EPA at least once per model year (they are not part of the Manufacturer FE Label dataset).	Verify	Back End	EPA		
NEW GL-176	Fuel Cost Model Year	The fuel cost model year entered by EPA for each fuel usage type.			TRUE	1 for each Fuel Usage Type in Verify Table	N(4)	Integer	4	4					2050	These are database only fields.	Light Duty	FE Label	These fields are entered by EPA at least once per model year (they are not part of the Manufacturer FE Label dataset).	Verify	Back End	EPA	New LD-FE-GL-BR097	
NEW GL-177	Fuel Cost Effective Date	The effective date of the fuel cost value.			TRUE	1 for each Fuel Usage Type in Verify Table	Date	Date								These are database only fields. Old values for fuel cost for the same model year must be saved in the database.	Light Duty	FE Label	These fields are entered by EPA at least once per model year (they are not part of the Manufacturer FE Label dataset).	Verify	Back End	EPA		
NEW GL-178	Fuel Cost Ineffective Date	The ineffective date of the fuel cost value.			TRUE	1 for each Fuel Usage Type in Verify Table	Date	Date								These are database only fields. Old values for fuel cost for the same model year must be saved in the database.	Light Duty	FE Label	These fields are entered by EPA at least once per model year (they are not part of the Manufacturer FE Label dataset).	Verify	Back End	EPA		
EPA Entered Derived 5-Cycle Calculation Constants (4 constants required for each Model Year entry)																								
NEW GL-180	Derived 5C City Slope Constant	Verify table that stores the required city slope constant for each model year that is entered by EPA to calculate the city fuel economy for derived 5-cycle fuel economy labels. Also used for the Litmus Threshold calculation.			TRUE	1 for each Model Year entry in Verify Table	N(7,6)	Decimal				5	4	0.0000	9.9999	These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 1.1805	Verify	Back End	EPA		
NEW GL-181	Derived 5C City Offset Constant	Verify table that stores the required city offset constant for each model year that is entered by EPA to calculate the city fuel economy for derived 5-cycle fuel economy labels. Also used for the Litmus Threshold calculation.			TRUE	1 for each Model Year entry in Verify Table	N(7,6)	Decimal				7	6	0.000000	9.999999	These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 0.003259	Verify	Back End	EPA		
NEW GL-182	Derived 5C Highway Slope Constant	Verify table that stores the required highway slope constant for each model year that is entered by EPA to calculate the highway fuel economy for derived 5-cycle fuel economy labels. Also used for the Litmus Threshold calculation.			TRUE	1 for each Model Year entry in Verify Table	N(7,6)	Decimal				5	4	0.0000	9.9999	These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 1.3466	Verify	Back End	EPA		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
Fuel Economy Label Information																								
NEW GL-183	Derived 5C Highway Offset Constant	Verify table that stores the required highway offset constant for each model year that is entered by EPA to calculate the highway fuel economy for derived 5-cycle fuel economy labels. Also used for the Litmus Threshold calculation.			TRUE	1 for each Model Year entry in Verify Table	N(7,6)	Decimal				7	6	0.000000	9.999999	These are database only fields. This is the table used to perform EPA derived 5-cycle label calculations. Any Model Year that does not have an entry in this table will use the last prior Model Year's coefficients.	Light Duty	FE Label	These fields are entered by EPA no more than once per model year (they are not expected to change every year). Table should be initialized with 2008 Model Year value = 0.001376	Verify	Back End	EPA		

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Certificate Request Information																								
CR-0.5	**Process Code**	Select the desired process code for the current submission.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails	RequestProcessCode	TRUE		A(1)	Enumeration	1	1						N = New ~~dataset~~ ~~C = Correction of existing dataset~~ U = Unlock Request L = Lock Request I = Introduction Into Commerce Date Update	Light-Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR002 LD-CERT-CR-BR016 LD-CERT-CR-BR017 LD-CERT-CR-BR019	(Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Evaporative/Refueling Family Name (CR-5) and Model Year (CR-3). CR-BR2: If Process Code (CR-0.5) is equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Model Year (CR-3). If Process Code = 'R' or 'D' or 'C' , a record must exist in Verify for the primary key of this module.
CR-1	**Manufacturer Code**	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ManufacturerSpecificDetails	EPAManufacturerCode	TRUE		A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Certification		Verify	Front End	XML	LD-CERT-CR-BR019 LD-CERT-CR-BR020a LD-CERT-CR-BR020b LD-CERT-CR-BR020c	CR-BR019 : When requesting a Certificate Request report (CR-0.5 (Process Code) equals 'R' (Report)), a Certificate Request record must exist with the same Test Group (CR-2), Evaporative / Refueling Family (CR-5), Model Year (CR-3), and Manufacturer Code (CR-1). CR-BR20: Manufacturer Code of the Submission Author Details must match the Manufacturer Code (CR-1) of the submitted dataset.
CR-3	**Model Year**	Enter the applicable model year for this test group.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ManufacturerSpecificDetails	ModelYear	TRUE		N(4)	Number	4	4				1957	2100		Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR002 LD-CERT-CR-BR016 LD-CERT-CR-BR019	CR-BR1: If Process Code (CR-0.5) is not equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Evaporative/Refueling Family Name (CR-5) and Model Year (CR-3). CR-BR2: If Process Code (CR-0.5) is equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Model Year (CR-3).
CR-4	**Test Group**	Enter the applicable test group name for the Certificate Request.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ManufacturerSpecificDetails	TestGroupName	TRUE		A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\.][A-Z0-9]{1,6})?						Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR002 LD-CERT-CR-BR019 LD-CERT-CR-BR021 LD-CERT-CR-BR022	CR-BR1: If Process Code (CR-0.5) is not equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Evaporative/Refueling Family Name (CR-5) and Model Year (CR-3). CR-BR2: If Process Code (CR-0.5) is equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Model Year (CR-3). CR-BR019 : When requesting a Certificate Request report (CR-0.5 (Process Code) equals 'R' (Report)), a Certificate Request record must exist with the same Test Group (CR-2), Evaporative / Refueling Family (CR-5), Model Year (CR-3), and Manufacturer Code (CR-1). CR-BR21: The CSI report for this Test Group (CR-4) and Evaporative/Refueling Family (CR-5) combination shows failed tests. CR-BR22: An Application for Certification document must have been submitted for this Engine Family. The 1st character must match EPA's assigned code for
CR-5	**Evaporative/Refueling Family Name**	Enter the applicable evaporative/refueling family name for this Certificate Request.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ManufacturerSpecificDetails	EvaporativeRefuelingFamilyName	FALSE		A(12)	String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{0-9}[4]{A-Z0-9}{3}						Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR001 LD-CERT-CR-BR019 LD-CERT-CR-BR021	CR-BR1: If Process Code (CR-0.5) is not equal to 'I' (Update Commerce Introduction Date), then a Test Group record must exist in the system for the same Test Group (CR-4) and Evaporative/Refueling Family Name (CR-5) and Model Year (CR-3). CR-BR019 : When requesting a Certificate Request report (CR-0.5 (Process Code) equals 'R' (Report)), a Certificate Request record must exist with the same Test Group (CR-2), Evaporative / Refueling Family (CR-5), Model Year (CR-3), and Manufacturer Code (CR-1). CR-BR21: The CSI report for this Test Group (CR-4) and Evaporative/Refueling Family (CR-5) combination shows failed tests.
CR-7	**Commerce Introduction Date**	Enter the date this Test Group will be entered into commerce.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ManufacturerSpecificDetails	CommerceIntroductionDate	FALSE			Date (YYYYMMDD)			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light Duty	Certification	Is this being moved to Testgroup Info?	Manufacturer	Front End	XML	LD-CERT-CR-BR011 LD-CERT-CR-BR012	~~If this field is not being moved to Testgroup Info, then~~ it's required when process code (CR-0.5) = 'N', 'L', ~~'C',~~ or 'I'. CR-BR11: If Process Code (CR-0.5) is equal to 'I' (Update Commerce Introduction Date) then Commerce Introduction Date (CR-7) is required. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required.
CR-9	**Meet All Applicable Standards Indicator**	Do all the tested vehicles meet all the applicable standards?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	MeetAllApplicableStandardsIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	~~Required when process code (CR-0.5) = 'N' or 'L'.~~ ~~'C'.~~ CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-10	**Meet All Applicable Requirements Indicator**	Does this test group/evaporative family comply with all the applicable requirements of 40 CFR Parts 85 and 86?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	MeetAllApplicableRequirementsIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' 'C'. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Certificate Request Information																								
CR-11	**OBD System Approval Indicator**	Has the OBD system for this test group/evaporative family been approved by EPA or CARB?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	OBDSystemApprovalIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' 'C'. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-12	**CARB Executive Order Issued Indicator**	If this a California only Test Group have you received the applicable CARB executive order?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	CARBExecutiveOrderIssuedIndicator	FALSE			Enumeration								Y = Yes N = No NA = Not Applicable	Light Duty	Certification	If "NA" is selected, Verify should treat it as a "Yes" and this should not block the certificate from being issued.	Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' 'C'. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-13	**CARB Executive Order Number**	If yes, what is the executive order number?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	CARBExecutiveOrderNumberText	FALSE			String	1	15							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR015	Required if the answer to Question 4 (CR-12) is yes. CR-BR15: If CARB Executive Order Issued Indicator (CR-12) is equal to 'Y' (Yes) then CARB Executive Order Number (CR-13) is required.
CR-14	**ORVR System Approval Indicator**	Has the safety of the ORVR system for this evaporative/refueling family been approved by EPA?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	ORVRSystemApprovalIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' 'C'. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-15	**Compliance Fee Paid Indicator**	Has the full amount of the applicable certification fees been paid for this test group?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	ComplianceFeePaidIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' ~~'C'~~. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-16	**No Defeat Device Indicator**	Are the vehicles covered by this test group/evaporative family free of defeat devices and strategies?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	NoDefeatDeviceIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012 LD-CERT-CR-BR018	Required when process code (CR-0.5) = 'N' or 'L' ~~'C'~~. CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commerce Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required. CR-BR-18: This rule does not cause the transaction to be rejected. However, this certificate request has been denied since at least one of Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), or No Defeat Device Indicator (CR-16) is equal to 'N' (No).
CR-22	**GHG Pre-Model Year Report Indicator**	**Has the green house gas pre-model year report been submitted to EPA for this model yearand does it meet all requirements 40 CFR 600.514?**	**CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails**	**PreModelYearReportIndicator**	**FALSE**			**Enumeration**								**Y = Yes N = No**	**Light Duty**	**Certification**		**Manufacturer**	**Front End**	**XML**	**LD-CERT-CR-BR024**	**CR-BR24: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) and Model Year (CR-3) is 2012 or later then GHG Pre-Model Year Report Indicator (CR-22) is required, otherwise not allowed** Required when Model Year >= 2012

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	Validation Rules
Certificate Request Information																								
CR-17	**CAP2000 Conditional Certificate**	Does this test group and evaporative family need a CAP 2000 conditional certificate because EPA confirmatory testing is pending (i.e., a test has been scheduled with EPA but has not occurred at the time a certificate is being requested?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	CAP2000ConditionalIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012	Required when process code (CR-0.5) = 'N' or 'L' ~~or 'A'~~ CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commence Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required.
CR-18	**Independent Commercial Importer Certificate**	Is this an Independent Commercial Importer (ICI) certificate?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	ICICertificateIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012	Required when process code (CR-0.5) = 'N' or 'L' ~~or 'A'~~ CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commence Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required.
CR-19	**Alternate Fuel Converter Certificate**	Is this an alternative fuel converter certificate?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	AlternateFuelConverterCertificateIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR012	Required when process code (CR-0.5) = 'N' or 'L' ~~or 'A'~~ CR-BR12: If Process Code (CR-0.5) is equal to 'N' (New) or 'L' (Lock) then Commence Introduction Date (CR-7), Meet All Applicable Standards Indicator (CR-9), Meet All Applicable Requirements Indicator (CR-10), OBD System Approval Indicator (CR-11), CARB Executive Order Issued Indicator (CR-12), ORVR System Approval Indicator (CR-14), Compliance Fee Paid Indicator (CR-15), No Defeat Device Indicator (CR-16), CAP2000 Conditional Certificate (CR-17), ICI Certificate Indicator (CR-18), and Alternate Fuel Converter Indicator (CR-19) are required.
CR-20	**Certificate Locking Comment**	Enter any comments for this certificate locking request.	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	LockCommentText	FALSE		A(1000)	String	1	1000							Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR013	
CR-21	**Revised Certificate?**	Is a revised certificate needed?	CertificateRequestSubmissionInformation/CertificateRequestInformationDetails/ApplicationSpecificDetails	RevisedCertificateIndicator	FALSE			Enumeration								Y = Yes N = No	Light Duty	Certification		Manufacturer	Front End	XML	LD-CERT-CR-BR014 LD-CERT-CR-BR017	Required is Process Code = 'L'

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																					
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules	
	New dataset for "Roadload Information". This dataset will be due after the FE Label dataset since this dataset references model type information that is collected in the FE Label dataset. Some of the fields will be pulled in from the FE Label dataset based on the Model Type Index and Subconfiguration Index entered by the manufacturer in the road load dataset and then the manufacturer will enter another 12 fields and Verify will calculate 2 fields.																								
NEW RL-1	Process Code	Select the desired process code for the current road load entry submission.	RoadLoadDataSubmission/RoadLoadDetails	InformationProcessCode	TRUE	1 per Road Load	A(1)	Enumeration								N = New dataset C = Correction of existing Verify dataset	Light Duty	Road Load		Manufacturer	Front End	XML	New LD-FE-RL-BR001	If Process Code = "R" or "D" or "C" , a record must exist in Verify for the primary key of this module.	
NEW RL-1.5	Road Load Index	The Verify-assigned unique index number for this road load submission.	RoadLoadDataSubmission/RoadLoadDetails	RoadLoadIndexNumber	TRUE	1 per Road Load	N(5)	Integer						1	99999		Light Duty	Road Load		Verify	Front End	XML			
RL-1.6	Model Year	Enter the model year for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	ModelYear	TRUE	1 per Road Load	N(4)	Integer									Light Duty	Road Load		Manufacturer	Front End	XML	New LD-FE-RL-BR002		
NEW RL-2	FE Label Model Type Index	Enter the Manufacturer-assigned index number for the model type for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	ModelTypeIndexNumber	TRUE	1 per Road Load	N(3)	Integer						1	999		Light Duty	Road Load		Manufacturer	Front End	XML	New LD-FE-RL-BR002	Model Type Index + Mfr Code + Model Year must ~~not exist for process code (GL 0.5) = 'N', otherwise, must exist for other process codes.~~	
NEW RL-3	FE Label Subconfiguration Index	For this set of road load horsepower data, enter the applicable FE Label subconfiguration index number if this subconfiguration was used in an FE label, otherwise leave this field blank if the subconfiguration will be used in a future GHG/CAFE dataset.	RoadLoadDataSubmission/RoadLoadDetails	SubConfigurationIndexNumber	FALSE	1 per Road Load	N(2)	Integer				2		1	99		Light Duty	Road Load		Manufacturer	Front End	XML	New LD-FE-RL-BR003	FE Label Subconfiguration Index is only required if roadload information is being provided for an existing subconfiguration that was used in FE label.	
NEW RL-3.5	Release Date	The date this model type information can be released to the public.	~~FuelEconomyLabelSubmission/FuelEconomyLabelDetails~~	ReleaseDate	TRUE	1 per Road Load		Date (YYYYMMDD)			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light Duty	Road Load	GL-176	Verify	Back End	Pre-existing			
NEW RL-4	Test Group	Enter the applicable test group name for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	TestGroupName	TRUE	1..n per Road Load	A(12)	String	12	12							Light Duty	Road Load	GL-126	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	~~GL-BR34~~	~~TestGroup must have already been certified.~~	
NEW RL-5	Engine Code	Enter the applicable engine code assigned by the manufacturer for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	EngineCodeText	TRUE	1 per Road Load	A(14)	String	1	14							Light Duty	Road Load	GL-119	Verify or Manufacturer	Back End or Front End	Pre-existing or XML			
NEW RL-5.1	Equivalent Engine Code(s)	Enter all applicable equivalent engine codes for the engine code for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	EquivalentEngineCodeText	TRUE	1..n per Engine Code per Road Load	A(14)	String	1	14							Light Duty	Road Load		Manufacturer	Front End	XML			
NEW RL-6	In-Use Engine Code Decoder	Enter a description of the engine code for this road load entry that distinguishes it from similar engine codes per 600.512-12(c)(11).	RoadLoadDataSubmission/RoadLoadDetails	InUseEngineCodeDescriptionText	TRUE	1 per Road Load	A(500)	String	1	500							Light Duty	Road Load		Manufacturer	Front End	XML			
NEW RL-7	Displacement	Enter the applicable engine displacement in liters for this road load entry. In Liters.	RoadLoadDataSubmission/RoadLoadDetails	EngineDisplacementValue	TRUE	1 per Road Load	N(5,3)	Decimal				5	3	0.001	99.999		Light Duty	Road Load	GL-26 (TG-38)	Verify or Manufacturer	Back End or Front End	Pre-existing or XML			
NEW RL-8	Carline Manufacturer Code	Enter the applicable manufacturer code for this road load entry.	TBD	EPAManufacturerCode	TRUE	1 per Road Load	A(3)	String	3	3	[A-Z0-9]{3}						Light Duty	Road Load	GL-125.5	Verify	Back End	Pre-existing	~~GL-BR59 (same as GL-BR44 for new data element)~~		
NEW RL-9	Carline Division Code	Enter the applicable manufacturer code for this road load entry.	TBD	ManufacturerDivisionCode	TRUE	1 per Road Load	N(2)	Integer	1	2				1	99		Light Duty	Road Load	GL-125.6	Verify	Back End	Pre-existing	~~GL-BR60 (same as GL-BR46 for new data element)~~		

NEW RL-9.1	Carline Division Name	Enter the applicable manufacturer code for this road load entry.	TBD	ManufacturerDivisionCode	TRUE	1 per Road Load	N(2)	Integer	1	2				1	99		Light Duty	Road Load	Pulled in from Division table using Division Code	Verify	Back End	Pre-existing	~~GL-BR60 (same as GL-BR46 for new data element)~~	
NEW RL-10	Carline Code	Enter the applicable manufacturer code for this road load entry.	TBD	CarlineCode	TRUE	1 per Road Load	N(3)	Integer	1	3				1	999		Light Duty	Road Load	GL-125.7	Verify	Back End	Pre-existing	~~GL-BR61 (same as GL-BR47)~~	
NEW RL-10.1	Carline Name	Enter the applicable manufacturer code for this road entry.	TBD	CarlineCode	TRUE	1 per Road Load	N(3)	Integer	1	3				1	999		Light Duty	Road Load	CL-6	Verify	Back End	Pre-existing	~~GL-BR61 (same as GL-BR47)~~	
NEW RL-11	Drive system	Enter the applicable drive system for this road load entry.	TBD	TestDriveCode	TRUE	1 per Road Load	A(1)	Enumeration								4 = 4-wheel Drive F = 2-wheel Drive, front R = 2-wheel drive, rear P= Part-time 4-wheel drive A = All wheel drive	Light Duty	Road Load	GL-72	Verify	Back End	Pre-existing		
NEW RL-12	Transmission Type	Enter the transmission type for this road load entry.	TBD	LightDutyTransmissionTypeIdentifier	TRUE	1 per Road Load	A(3)	Enumeration								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable SCV=Selectable Continuously Variable (e.g. CVT with paddles) OT = Other	Light Duty	Road Load	GL-67	Verify	Back End	Pre-existing	~~VI-BR23~~	
NEW RL-13	Number of Transmission Gears	The number of transmission gears on this road load entry. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	TBD	TransmissionGearCount	TRUE	1 per Road Load	N(2)	Integer						1	99		Light Duty	Road Load	GL-71	Verify	Back End	Pre-existing	~~VI-BR24~~	~~If VI-36 = CVT, then VI-40 = 1.~~
NEW RL-14	Transmission as listed in the FE Guide	Verify-determined Transmission Class for this road load entry based on the values for Transmission Type and Number of Transmission Gears.	TBD	TBD	TRUE	1 per Road Load	A(12)	Enumeration								Determined by Verify from GL-67 (Transmission Type) and GL-71 (Total number of Transmission Gears) as follows: If GL-67 is: A= "Auto(AX)" AM = "Auto(AMX)" M = "Manual(MX)" SA = "Auto(SX)" CVT= "Auto(AV)" SCV= "Auto(AV-SX)" OT = "Other(OT-X)" Derived field is in quotes- where: X is the total number of forward gears listed in GL-71.	Light Duty	Road Load		Verify	Back End	Pre-existing		
NEW RL-15	Axle Ratio	Enter the axle ratio for this test vehicle road load entry.	RoadLoadDataSubmission/RoadLoadDetails	AxleRatioValue	TRUE	1 per Road Load	N(3,2)	Decimal				3	2	0.00	9.99		Light Duty	Road Load	GL-120	Verify or Manufacturer	Back End or Front End	Pre-existing or XML		
NEW RL-16	Rim and tire size	Enter the standard tire/rim size description as imprinted on the side wall of the tire for this road load entry	RoadLoadDataSubmission/RoadLoadDetails	RimAndTireSizeDescriptionText	TRUE	1 per Road Load	A(20)	String	1	20							Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-17	Tire Type	Select the applicable tire type for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	TireTypeIdentifier	TRUE	1 per Road Load	A(3)	Enumeration								-ALS = All Season -AT = All Terrain -HPR = High Performance -LRR = Low Rolling Resistance -RF = Run Flat	Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-18	Tire Manufacturer	Enter the tire manufacturer for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	TireManufacturerName	TRUE	1 per Road Load	A(25)	String	1	25							Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-19	N/V Ratio	Enter the applicable N/V ratio for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	NVRatioValue	TRUE	1 per Road Load	N(4,1)	Decimal				4	1	0.0	999.9		Light Duty	Road Load		Manufacturer	Front End	XML		

NEW RL-20	Curb Weight	Enter the curb weight in pounds for this road load entry. Curb weight is defined as the actual or mfr's estimated weight of the vehicle in operational status with all standard equipment and weight of fuel at nominal tank capacity and the weight of optional equipment computed in accordance with CFR86.082-24.	RoadLoadDataSubmission/RoadLoadDetails	CurbWeightValue	TRUE	1 per Road Load	N(5)	Integer						0	14000		Light-Duty	Road Load		Manufacturer	Front end	XML		
NEW RL-21	ETW	Select the ETW, equivalent test weight, in pounds for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	EquivalentTestWeightValue	TRUE	1 per Road Load	N(5)	Integer / Enumeration						0	14000	1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750,	Light Duty	Road Load	GL-123	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	~~VI-BR19~~	~~VI-30 > VI-29~~
NEW RL-22	Manufacturer-Calculated Total Road Load Horsepower	Enter the total road load horsepower at 50 mph (TRLHP50) for this subconfiguration.	RoadLoadDataSubmission/RoadLoadDetails	RoadLoadHorsepowerValue	TRUE	1 per Road Load	N(3,1)	Decimal				3	1	0	99.9		Light Duty	Road Load	GL-122	Verify or Manufacturer	Back End or Front End	Pre-existing or XML	New LD-FE-RL-BR004	
NEW RL-23	Verify-Calculated Total Road Load Horsepower	The total road load horsepower at 50 mph (TRLHP50) as calculated by Verify for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails/EPAGeneratedDataDetails	TotalRoadLoadHorsepowerValue	TRUE	1 per Road Load	N(3,1)	Decimal				3	1	0	99.9		Light Duty	Road Load	Calculation = (a+50*b+2500*c)/7.5	Verify	Back End	Assigned	New LD-FE-RL-BR004	Manufacturer-calculated TRLHP must equal the EPA-calculated TRLHP after both have been rounded to 0.1
NEW RL-24	Target Coefficient A (F0) (lbf)	Enter the target A-term coefficient from test track force vs. velocity equation for this road load entry. (lbf)	RoadLoadDataSubmission/RoadLoadDetails	TargetCoefficientAValue	TRUE	1 per Road Load	N(6,3)	Decimal				6	3	-1000	999.999		Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-25	Target Coefficient B (F1) (lbf/mph)	Enter the target B-term coefficient from test track force vs. velocity equation for this road load entry. (lbf/mph)	RoadLoadDataSubmission/RoadLoadDetails	TargetCoefficientBValue	TRUE	1 per Road Load	N(6,5)	Decimal				6	5	-10	9.99999		Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-26	Target Coefficient C (F2) (lbf/mph**2)	Enter the target C-term coefficient from test track force vs. velocity equation for this road load entry. (lbf/mph**2)	RoadLoadDataSubmission/RoadLoadDetails	TargetCoefficientCValue	TRUE	1 per Road Load	N(7,6)	Decimal				7	6	-10	10		Light Duty	Road Load		Manufacturer	Front End	XML		
NEW RL-27	Road Load Determination Method	Select the applicable road load determination method for this road load entry.	RoadLoadDataSubmission/RoadLoadDetails	RoadLoadDeterminationIdentifier	TRUE	1 per Road Load	A(10)	Enumeration								-Calculated (Vehicle not coasted down on track) -Measured (Actual vehicle coasted down on track)	Light Duty	Road Load		Manufacturer	Front End	XML		

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality
Date 2011-May-13

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																				
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules	English validation rules
This new footprint dataset will be required for trucks beginning with model year 2010 and for cars beginning with model year 2011.																								
NEW FT-0.5	Process Code	Select the desired process code for the current footprint entry submission.	FootprintDataSubmission /FootprintDataDetails	InformationProcessCode	TRUE	1 per footprint submission	A(1)	Enumeration								N = New dataset C = Correction of existing Verify dataset	Light Duty	Footprint		Manufacturer	Front End	XML	TBD	
NEW FT-1	Carline Manufacturer Code	Enter the 3-character alphanumeric code assigned by EPA to each manufacturer for the carline for which footprint information is being submitted.	FootprintDataSubmission /FootprintDataDetails	EPAManufacturerCode	TRUE	1 per footprint submission	A(3)	Fixed string	3	3	[A-Z0-9]{3}						Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML		
NEW FT-2	Model Year	Enter the applicable model year for this carline for which footprint information is being submitted.	FootprintDataSubmission /FootprintDataDetails	ModelYear	TRUE	1 per footprint submission	N(4)	Integer						1957	2100		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML		
NEW FT-3	Division Code	Enter the applicable division for this carline for which footprint information is being submitted.	FootprintDataSubmission /FootprintDataDetails	ManufacturerDivisionCode	TRUE	1 per footprint submission	N(2)	Integer						1	99		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML		
NEW FT-4	CarLine Code	Enter the applicable carline code (assigned by the manufacturer) for this carline for which footprint information is being submitted.	FootprintDataSubmission /FootprintDataDetails	CarlineCode	TRUE	1 per footprint submission	N(3)	Integer						1	999		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer	Front End	XML		
NEW FT-5	Footprint Index	Verify-generated footprint index assigned to each footprint within a carline.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	FootprintIndexNumber	TRUE	1..n for each footprint submission	N(2)	Integer				2	0	1	99		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset) For web screens, Verify should automatically increment the index when mfr chooses to add another footprint. For batch, does the mfr need to enter?	Verify	Front End	XML		
NEW FT-6	Footprint Description	Enter the manufacturer's model type and footprint description (e.g. "super cab, 4WD, long bed, Dooley"; "super cab, 2WD, short bed", etc.) . Repeat for each footprint within this carline.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	ModelTypeFootprintDescriptionText	TRUE	1 per footprint index per footprint submission	A(300)	String	1	300							Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/Verify	Front End/Back End	XML/Pre-existing		
NEW FT-7	Wheel base (inches)	Enter the wheel base of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	WheelBaseValue	TRUE	1 per footprint index per footprint submission	N(5,1)	Decimal				5	1	0.1	9999.9		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/Verify	Front End/Back End	XML/Pre-existing		
NEW FT-8	Front Track Width (inches)	Enter the front track width of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	FrontTrackWidthValue	TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/Verify	Front End/Back End	XML/Pre-existing		
NEW FT-9	Rear Track Width (inches)	Enter the rear track width of this footprint for this carline measured in inches and rounded to one tenth of an inch.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	RearTrackWidthValue	TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/Verify	Front End/Back End	XML/Pre-existing		
NEW FT-10	Manufacturer-Calculated Footprint Rounded to One Decimal Place (square feet)	The Manufacturer-calculated area of this footprint for this carline according to the footprint definition specified in 49 CFR 523.2.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	FootprintAreaMeasure	TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	These fields are being cut from FE Label and moved to a new standalone dataset (or added to the existing carline dataset)	Manufacturer/Verify	Front End/Back End	XML/Pre-existing		

NEW FT-11	EPA-Calculated Footprint Rounded to One Decimal Place (square feet)	The Verify-calculated area of this footprint for this carline according to the footprint definition specified in 49 CFR 523.2.	FootprintDataSubmission /FootprintDataDetails/EPAGeneratedDataDetails/EPAGeneratedFootprintDetails	FootprintRounded1DecimalValue	TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	Verify should calculate the footprint and display it on the front end using the following equation: Footprint = (((Front Track Width (GL-106.7) + Rear Track Width (GL-106.8)) / 2) * Wheelbase (GL-106.6)) / 144 rounded to one tenth of a square foot using ASTM rounding procedures. The result should then be stored on the back end. Any changes to GL-106.7, GL-106.8, or GL-106.6 should trigger a recalculation of this value.	Verify	Back End	Assigned		
NEW FT-12	Discrepancy of Manufacturer and EPA-Calculated Footprint	The Verify-calculated absolute value of the discrepancy of the manufacturer and EPA-calculated footprint.	FootprintDataSubmission /FootprintDataDetails/EPAGeneratedDataDetails/EPAGeneratedFootprintDetails	FootprintManufacturerDiscrepancyValue	TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0	999.9		Light Duty	Footprint		Verify	Back End	Assigned		
NEW FT-13	Manufacturer Footprint Target FE Value Rounded to Two Decimal Places (miles per gallon)	Enter the manufacturer-calculated target fuel economy value (in miles per gallon) of this footprint for this model type.	FootprintDataSubmission /FootprintDataDetails/FootprintIndexDetails	TargetMilesPerGallonValue	TRUE	1 per footprint index per footprint submission	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	Footprint		Mfr	Front End	XML		
NEW FT-14	EPA Footprint Target FE Value Rounded to Two Decimal Places (miles per gallon)	The EPA-calculated target fuel economy value (in miles per gallon) of this footprint.	FootprintDataSubmission /FootprintDataDetails/EPAGeneratedDataDetails/EPAGeneratedFootprintDetails	FootprintTargetFuelEconomyRounded2DecimalValue	TRUE	1 per footprint index per footprint submission	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	Footprint	See separate FE calculation tab for the equation as well as the table of required coefficients (Section 533.3, Table V -- Parameters for the Reformed CAFE FE Targets) by model year. This table should be modifiable by EPA.	Verify	Back End	Assigned		
NEW FT-15	Footprint Target FE Discrepancy Value	The EPA-calculated absolute value of the discrepancy between the manufacturer and EPA Target FE values.	FootprintDataSubmission /FootprintDataDetails/EPAGeneratedDataDetails/EPAGeneratedFootprintDetails	FootprintTargetFuelEconomyDiscrepancyValue	TRUE	1 per footprint index per footprint submission	N(5,2)	Decimal				5	2	0	999.99		Light Duty	Footprint	This value is the difference between the EPA footprint target FE value (FT-14) and the mfr footprint target FE value (FT-13).	Verify	Back End	Assigned		
NEW FT-16	Manufacturer Footprint Target GHG Value Rounded to Two Decimal Places (grams per mile)	Enter the manufacturer-calculated target greenhouse gas value (in miles per gallon) of this footprint for this model type.			TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint		Mfr	Front End	XML		
NEW FT-17	EPA Footprint Target GHG Value Rounded to Two Decimal Places (grams per mile)	The EPA-calculated target greenhouse gas value (in miles per gallon) of this footprint.			TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	See separate GHG calculation tab.	Verify	Back End	Assigned		
NEW FT-18	Footprint Target GHG Discrepancy Value	The EPA-calculated absolute value of the discrepancy between the manufacturer and EPA Target GHG values.			TRUE	1 per footprint index per footprint submission	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	Footprint	This value is the difference between the EPA footprint target GHG value (FT-17) and the mfr footprint target GHG value (FT-16).	Verify	Back End	Assigned		
This is an EPA-Only database table that needs to be created. EPA will need to enter these coeffiecients into the database tables before the CAFE and GHG calculations can be completed																									
New FT-19	Footprint Coefficient Model Year	The applicable model year for each set of CAFE and GHG coefficients.			TRUE	1	N(4)	Year	4	4		4	0	2008	2100				Will be entered manually once per model year with updated coefficients per regulation using back-end database	EPA	Back End	Assigned		
New FT-20	CAFE Footprint Target Minimum Domestic Passenger Vehicle Standard	EPA entered minimum allowed value for final Average Target FE calculation result. Applies to Domestically manufactured Passenger Vehicles only.			TRUE	1 per model year	N(5,1)	Decimal				5	1	0	9999.9					EPA	Back End	Assigned		
New FT-21	CAFE Footprint Passenger Vehicle Coefficient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-22	CAFE Footprint Passenger Vehicle Coefficient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-23	CAFE Footprint Passenger Vehicle Coefficient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-24	CAFE Footprint Passenger Vehicle Coefficient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		

New FT-25	CAFE Footprint Light Truck Coefficient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-26	CAFE Footprint Light Truck Coefficient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-27	CAFE Footprint Light Truck Coefficient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-28	CAFE Footprint Light Truck Coefficient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-29	GHG Footprint Passenger Vehicle Coeffecient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-30	GHG Footprint Passenger Vehicle Coeffecient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-31	GHG Footprint Passenger Vehicle Coeffecient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-32	GHG Footprint Passenger Vehicle Coeffecient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-33	GHG Footprint Light Truck Coeffecient A	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-34	GHG Footprint Light Truck Coeffecient B	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-35	GHG Footprint Light Truck Coeffecient C	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		
New FT-36	GHG Footprint Light Truck Coeffecient D	EPA entered coefficients needed for CAFE calculations with different coefficients for cars and trucks.			TRUE	1 per model year	N(11,7)	Decimal				11	7	0	9999.9999999					EPA	Back End	Assigned		

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality
Date 2011-May-13

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Exp IE End Vali dati on	Bus Ex End Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-3	**Process Code**	Enter the desired Process Code for the current submission.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	InformationProcessCode	TRUE	1.. per CAFE/GHG	A(1)	Enumeration			[A-Z0-9](3)					N = New dataset C = Correction of an existing Verify dataset	Light Duty	FE CAFE			Mfr	Front End	XML				If process code=R, D or C a record must exist in Verify for the primary key of this module.
CA-0	**Manufacturer Code**	The three character code assigned by EPA to each manufacturer. This will be derived from users' CDX account.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	EPAManufacturerCode	TRUE	1.. per CAFE/GHG	A(3)	String	3	3							Light Duty	FE CAFE		Derived from user login	Verify	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR002 LD-FE-CA-BR006 LD-FE-CA-BR008 LD-FE-CA-BR016 LD-FE-CA-BR017 LD-FE-CA-BR021a LD-FE-CA-BR021b LD-FE-CA-BR022	CAFE Compliance Category + Mfr Code + Model Year must not exist for process code=N, otherwise, must exist for other process codes.
CA-1	**Model Year**	Enter the applicable Model Year for this CAFE submission.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	ModelYear	TRUE	1.. per CAFE/GHG	N(4)	Year	4	4				1957	2100		Light Duty	FE CAFE		Lock the MY CAFE data after the official MY CAFE letter is sent. Data can't be modified w/o unlocked by EPA staff.	Mfr	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR002 LD-FE-CA-BR006 LD-FE-CA-BR008 LD-FE-CA-BR010 LD-FE-CA-BR022	CAFE Compliance Category + Mfr Code + Model Year must not exist for process code=N, otherwise, must exist for other process codes.
CA-4	~~CAFE Compliance Category~~ CAFE/GHG Compliance Category	Enter the applicable CAFE/GHG Compliance Category for this CAFE/GHG submission.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	ComplianceCategoryIdentifier	TRUE	1.. per CAFE/GHG	A(3)	Enumeration								~~DP = Domestic Passenger Vehicles~~ ~~IP = Import Passenger Vehicles~~ ~~LT = Light Trucks~~ ~~PV = Passenger Vehicles~~	Light Duty	FE CAFE		Based on the model type fuel indicator fields CA-26 to CA-28, Verify will be programmed to calculate the baseline (unadjusted and adjusted 4-decimal place) CAFE mpg values, the final (4-decimal place) CAFE mpg value and the rounded (one-decimal place) Official CAFE values. The Official CAFE value is limited to a maximum CAFE incentive credit of 1.2 mpg for 1993-2010 model years. See notes to data elements CA-26 to CA-28. The CAFE incentive credit for dual and alt-fuels can change from year to year. Create a look-up table for the allowed maximum dual fuel, alternate fueled vehicle CAFE credit vs. applicable model year.	Mfr	Front End	XML			LD-FE-CA-BR001a LD-FE-CA-BR001b LD-FE-CA-BR002	
CA-127 (New)	GHG Exempt Indicator	For the CAFE/GHG submitter, is your company exempt under 40 CFR 86.1801-12(j) or are the production units between 0 and 4999 over a period of time defined in 40 CFR 86.1801-12(k)?			FALSE	1.. per CAFE/GHG	A(1)	Enumeration								N=No Y=Yes	Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR031	Required if Model Year >=2012
CA-128 (new)	GHG Calculation Method	Enter GHG calculation method, i.e. carbon-related exhaust emissions (CREE) or optional carbon-related exhaust emissions (OCREE). OCREE includes N2) and CH4 in the equation, ref 40 CFR 600.113-12(h) thru (l).			FALSE	1.. per CAFE/GHG	A(5)	Enumeration								CREE = CREE OCREE = OCREE	Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR032	Required if Model Year >=2012
CA-129 (new)	For OCREE calculations, should N2O emissions always default to .010gpm?	Yes or no radio button. Business rule: Yes can only be used for 2012-2014 model years.			FALSE	1.. per CAFE/GHG	A(1)	Enumeration								N=No Y=Yes (2012 to 2014 only)	Light Duty	FE CAFE		'Yes' is only allowed for 2012 to 2014 model years	Mfr	Front End	XML			New LD-FE-CA-BR033	Required if Model Year >=2012 and <=2014
CA-4.5	**CAFE/GHG Final Status Indicator**	Is this CAFE/GHG submission complete and ready for EPA review? EPA will not review any CAFE/GHG submissions until this indicator is set to "Yes". If necessary, it will still be possible to submit a correction to the CAFE/GHG submission after this indicator has been set to "Yes".	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	FinalStatusIndicator	TRUE	1.. per CAFE/GHG	A(1)	Enumeration								N=No Y=Yes	Light Duty	FE CAFE			Mfr	Front End	XML				
CAFE & GHG Information: EPA Official Calculated Sales Information																										
CA-130 (New)	EPA Calculated Official Model Year GHG Production Units	The Verify-calculated final model year GHG production units for this CAFE/GHG Compliance Category (CA-4).			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999					New Verify calculation	Verify	Back End	Assigned			New LD-FE-CA-BR034	Required if Model Year >=2012
CA-131 (New)	EPA Calculated Official Model Year GHG TLAAS Production Units	The Verify-calculated final model year GHG TLAAS production units for this CAFE/GHG Compliance Category (CA-4).			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999					New Verify calculation	Verify	Back End	Assigned			New LD-FE-CA-BR035	Required if Model Year >=2012
CA-53 (New)	EPA Calculated Official Model Year Truck CAFE Production Units	The Verify-calculated final model year truck CAFE production units. Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999					New Verify calculation	Verify	Back End	Assigned			New LD-FE-CA-BR036	Required if CAFE/GHG Compliance Category = Light Truck
CA-54 (New)	EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	The Verify-calculated final model year domestic passenger vehicle CAFE production units. Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999					New Verify calculation	Verify	Back End	Assigned			New LD-FE-CA-BR037	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-55 (New)	EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	The Verify-calculated final model year import passenger vehicle CAFE production units. Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999					New Verify calculation	Verify	Back End	Assigned			New LD-FE-CA-BR038	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: Manufacturer Official Calculated Sales Information																										
~~Delete: CA 6~~	~~Final Model Year Production Units~~	~~Enter the final model year production units for this CAFE compliance category.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~FinalModelYearProductionNumber~~	~~TRUE~~	~~1.. per CAFE~~	~~N(7)~~	~~Integer~~						~~1~~	~~9999999~~		~~Light Duty~~	~~FE CAFE~~			~~Mfr~~	~~Front End~~	~~XML~~			Delete LD-FE-CA-BR015	~~Must not = 0~~
CA-132 (New)	Manufacturer Calculated Official Model Year GHG Production Units	Enter the manufacturer-calculated final model year GHG production units for this CAFE/GHG Compliance Category (CA-4).			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999						Mfr	Front End	XML			New LD-FE-CA-BR039	Required if Model Year >=2012
CA-133 (New)	Manufacturer Calculated Official Model Year GHG TLAAS Production Units	Enter the manufacturer-calculated final model year GHG TLAAS production units for this CAFE/GHG Compliance Category (CA-4).			FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999						Mfr	Front End	XML			New LD-FE-CA-BR039	Required if Model Year >=2012
CA-50 (New)	Manufacturer Calculated Official Model Year Truck CAFE Production Units	Enter the manufacturer-calculated final model year truck CAFE production units. Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails	OfficialProductionCount	FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999						Mfr	Front End	XML			New LD-FE-CA-BR040	Required if CAFE/GHG Compliance Category = Light Truck
CA-51 (New)	Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Enter the manufacturer-calculated final model year domestic passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails	OfficialProductionCount	FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999						Mfr	Front End	XML			New LD-FE-CA-BR041	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-52 (New)	Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Enter the manufacturer-calculated final model year import passenger vehicle CAFE production units. Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails	OfficialProductionCount	FALSE	1 per CAFE/GHG compliance category	N(7)	Integer				7	0	0	9999999						Mfr	Front End	XML			New LD-FE-CA-BR042	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: EPA Baseline Calculation Results (Does NOT include dual-fuel, alternative fuel incentive credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.																										
~~Delete: CA 5.0~~	~~EPA Baseline Average FE, Unrounded Unadjusted 4 Decimal~~	~~The Verify-calculated baseline average fuel economy miles per gallon value that has been truncated to 4 decimal places for this compliance category. The FE value does not contain incentive credit allowable for production of dual fuel, alternate fueled vehicles for the applicable model year, is unadjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but truncated to 4 decimal places.~~			~~TRUE~~	~~1.. per CAFE~~	~~N(8.6)~~	~~Decimal~~				~~8~~	~~6~~	~~0~~	~~99.999999~~		~~Light Duty~~	~~FE CAFE~~			~~Verify~~	~~Back End~~	~~Assigned~~				
~~Delete: CA 5~~	~~EPA Baseline Average FE, Unrounded Unadjusted 4 Decimal~~	~~The Verify-calculated baseline average fuel economy miles per gallon value that has been rounded to 4 decimal places for this compliance category. The FE value does not contain incentive credit allowable for production of dual fuel, alternate fueled vehicles for the applicable model year, is unadjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but truncated to 4 decimal places then rounded to 4 decimal places according to the rounding off method as specified in ASTM E29 67...~~			~~TRUE~~	~~1.. per CAFE~~	~~N(6.4)~~	~~Decimal~~				~~6~~	~~4~~	~~0~~	~~99.9999~~		~~Light Duty~~	~~FE CAFE~~			~~Verify~~	~~Back End~~	~~Assigned~~				

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro m Valu es	Ba ck Val ues	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-134 (New)	EPA Calculated Baseline Average GHG Unrounded 4 Decimal	The Verify-calculated baseline average GHG gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR043	Required if Model Year >=2012
CA-135 (New)	EPA Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	The Verify-calculated baseline average GHG TLAAS gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR044	Required if Model Year >=2012
CA-59 (New)	EPA Calculated Baseline Truck CAFE Unrounded 4 Decimal	The Verify-calculated baseline truck CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR045	Required if CAFE/GHG Compliance Category = Light Truck
CA-60 (New)	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The Verify-calculated baseline domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR046	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-61 (New)	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The Verify-calculated baseline import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR047	Required if CAFE/GHG Compliance Category = Passenger Vehicle
Delete: CA-5.3	EPA Baseline Average FE Rounded Unadjusted 1 Decimal	The Verify-calculated baseline average fuel economy miles per gallon value entered for Baseline Average FE Unrounded Unadjusted 4 Decimal (CA-6) and has further been rounded to 1 decimal place for this compliance category.			TRUE	1: per CAFE	N(3,1)	Decimal				3	1	0	99.9		Light Duty	FE CAFE				Verify	Back End	Assigned				
CA-136 (New)	EPA Calculated Baseline Average GHG Rounded Whole Number	The Verify-calculated baseline average GHG gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999		Light Duty					Verify	Back End	Assigned			New LD-FE-CA-BR048	Required if Model Year >=2012
CA-137 (New)	EPA Calculated Baseline Average GHG TLAAS Rounded Whole Number	The Verify-calculated baseline average GHG TLAAS gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999		Light Duty					Verify	Back End	Assigned			New LD-FE-CA-BR049	Required if Model Year >=2012
CA-63 (New)	EPA Calculated Baseline Truck CAFE Rounded 1 Decimal	The Verify-calculated baseline truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate fueled vehicles. Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(4,1) N(5,1)	Decimal				5	1	0	9999.9		Light Duty					Verify	Back End	Assigned			New LD-FE-CA-BR050	Required if CAFE/GHG Compliance Category = Light Truck
Delete: CA-7.8	EPA Baseline Average Passenger Vehicle FE Unrounded TPA Adjusted 6 Decimal	The Verify-calculated TPA adjusted average Fuel Economy value that has been truncated to 6 decimal places for this passenger automobile compliance category. The FE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 6 decimal places.			FALSE	1: per CAFE	N(8,6)	Decimal				8	6	0	99.999999		Light Duty	FE CAFE				Verify	Back End	Assigned				Calculation required when CAFE Compliance category (CA-4) = "DP" or "P", else, must not be present. (Present only if CA-4 <>LT)
Delete: CA-7.6	EPA Baseline Average Passenger Vehicle FE Unrounded TPA Adjusted 4 Decimal	The Verify-calculated TPA adjusted average Fuel Economy value that has been truncated to 6 decimal places then rounded to 4 decimal places for this passenger automobile compliance category. The FE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 6 decimal places then rounded to 4 decimal places.			FALSE	1: per CAFE	N(8,4)	Decimal				6	4	0	99.9999		Light Duty	FE CAFE				Verify	Back End	Assigned				Calculation required when CAFE Compliance category (CA-4) = "DP" or "P", else, must not be present. (Present only if CA-4 <>LT)
CA-66 (New)	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The Verify-calculated test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 4 decimal places. The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR051	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-67 (New)	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The Verify-calculated test procedure adjusted import passenger vehicle CAFE value that has been rounded to 4 decimal places. The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR052	Required if CAFE/GHG Compliance Category = Passenger Vehicle
Delete: CA-8	EPA Baseline Average Passenger Vehicle FE Rounded TPA Adjusted 1 Decimal	The Verify-calculated average Fuel Economy value for this passenger automobile compliance category. The FE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 6 decimal places then rounded to 1 decimal places.			FALSE	1: per CAFE	N(3,1)	Decimal				3	1	0	99.9		Light Duty	FE CAFE				Verify	Back End	Assigned				Calculation required when CAFE Compliance category (CA-4) = "DP" or "P", else, must not be present. (Present only if CA-4 <>LT)
CA-70 (New)	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The Verify-calculated test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 1 decimal place. The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Verify	Back End	Assigned			New LD-FE-CA-BR053	Required if CAFE/GHG Compliance Category = Passenger Vehicle

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																							
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nti End Vali dati on	Ba ckE nd Val ida tio n	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																											
CA-71 (New)	EPA Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The Verify calculated test procedure adjusted import passenger vehicle CAFE value that has been rounded to 1 decimal place. The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned					New LD-FE-CA-BR054	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: Mfr Baseline Calculation Results (Does NOT include dual-fuel, alternative fuel incentive credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.																											
~~Delete: CA-5.3~~	~~Mfr Baseline Average FE Unrounded Unadjusted 4 Decimal~~	~~Enter the manufacturer-calculated baseline average fuel economy miles per gallon value that has been rounded to 4 decimal places for this compliance category. The FE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles for the applicable model year; is unadjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but truncated to 5 decimal places than rounded to 4 decimal places according to the rounding-off method as specified in ASTM E29-67.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~ManufacturerBaselineAverageUnroundedUnadjustedValue~~	~~TRUE~~	~~1..per CAFE~~	~~N(6,4)~~	~~Decimal~~				~~6~~	~~4~~	~~0~~	~~99.9999~~		~~Light-Duty~~	~~FE CAFE~~		~~Mfr~~	~~Front-End~~	~~XML~~				
CA-138 (New)	Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal	The manufacturer-calculated baseline average GHG gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR055	Required if Model Year >=2012
CA-139 (New)	Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	The manufacturer-calculated baseline average GHG TLAAS gram per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR056	Required if Model Year >=2012
CA-56 (New)	Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal	The manufacturer-calculated baseline truck CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails/BaselineTruckDetails	UnroundedAdjustedValue	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR057	Required if CAFE/GHG Compliance Category = Light Truck
CA-57 (New)	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated baseline domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/BaselineVehicleDetails	UnroundedUnadjustedValue	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR058	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-58 (New)	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated baseline import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. The CAFE value is NOT adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails/BaselineVehicleDetails	UnroundedUnadjustedValue	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR059	Required if CAFE/GHG Compliance Category = Passenger Vehicle
~~CA-140~~ (New)	~~Manufacturer Calculated Baseline Average GHG Rounded Whole Number~~	~~The manufacturer-calculated baseline average GHG gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.~~			~~FALSE~~	~~1 per CAFE/GHG compliance category~~	~~N(4,0)~~	~~Integer~~				~~4~~	~~0~~	~~0~~	~~9999~~						~~Mfr~~	~~Front End~~	~~XML~~			~~New LD-FE-CA-BR060~~	~~Required if Model Year >=2012~~
CA-141 (New)	Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number	The manufacturer-calculated baseline average GHG TLAAS gram per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles.			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Mfr	Front End	XML			New LD-FE-CA-BR061	Required if Model Year >=2012
CA-62 (New)	Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal	The manufacturer-calculated baseline truck CAFE miles per gallon value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain incentive credit allowable for production of dual-fuel, alternate-fueled vehicles. Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails/BaselineTruckDetails	Rounded1Value	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML					New LD-FE-CA-BR062	Required if CAFE/GHG Compliance Category = Light Truck
CA-64 (New)	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The manufacturer-calculated baseline test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/BaselineVehicleDetails	UnroundedAdjustedValue	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR063	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-65 (New)	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The manufacturer-calculated baseline test procedure adjusted import passenger vehicle CAFE value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails/BaselineVehicleDetails	UnroundedAdjustedValue	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Mfr	Front End	XML					New LD-FE-CA-BR064	Required if CAFE/GHG Compliance Category = Passenger Vehicle
~~Delete: CA-5.66~~	~~Mfr Baseline Average Passenger Vehicle FE Rounded TPA Adjusted 1 Decimal~~	~~The manufacturer-calculated average Fuel Economy value for this passenger automobile compliance category. The FE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 1 decimal places.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~ManufacturerBaselineAverageRoundedAdjustedValue~~	~~FALSE~~	~~1..per CAFE~~	~~N(3,1)~~	~~Decimal~~				~~3~~	~~1~~	~~0~~	~~99.9~~		~~Light-Duty~~	~~FE CAFE~~		~~Mfr~~	~~Front-End~~	~~XML~~				
CA-68 (New)	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer-calculated baseline test procedure adjusted domestic passenger vehicle CAFE value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/BaselineVehicleDetails	Rounded1Value	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML					New LD-FE-CA-BR065	Required if CAFE/GHG Compliance Category = Passenger Vehicle

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-69 (New)	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer calculated baseline test procedure adjusted import passenger vehicle CAFE value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value does not contain the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails/BaselineVehicleDetails	Rounded1Value	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML			New LD-FE-CA-BR066	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: EPA Final Calculation Results (includes dual-fuel, alternative fuel incentive credits)				Note: All CAFE and GHG calculations use ASTM-E29 rounding.																						
Delete: CA-5,6	EPA Average FE Unrounded Unadjusted 5 Decimal	The Verify-calculated average fuel economy miles per gallon value truncated to 5 decimal places for this compliance category. The FE value is not adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places. For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual fuel, alternate fuel vehicles for the applicable model year (Maximum credit allowed: 1.3 mpg for MY 1993-2010, 0.8 mpg for MY 2011- 2014, ref: Energy Policy Act of 2005, Section 772-(b)(1)(3)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.3 credit allowed in the 2010 model year.			TRUE	1 per CAFE	N(8,6)	Decimal				8	6	0	99.999999		Light-Duty	FE CAFE			Verify	Back End	Assigned					
Delete: CA-5,7	EPA Average FE Unrounded Unadjusted 4 Decimal	The Verify-calculated average fuel economy miles per gallon value for this compliance category. The FE value is not adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 4 decimal places according to the rounding method as specified in ASTM E 29-67. For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual-fuel, alternate-fuel vehicles for the applicable model year (Maximum credit allowed: 1.3 mpg for MY 1993-2010, 0.8 mpg for MY 2011- 2014, ref: Energy Policy Act of 2005, Section 772-(b)(1)(3)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.3 credit allowed in the 2010 model year.			TRUE	1 per CAFE	N(8,4)	Decimal				6	4	0	99.9999		Light-Duty	FE CAFE			Verify	Back End	Assigned					
CA-142 (New)	EPA Calculated Final Average GHG Unrounded 4 Decimal	The Verify-calculated final average GHG grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Verify	Back End	Assigned			New LD-FE-CA-BR067	Required if Model Year >=2012
CA-143 (New)	EPA Calculated Final Average GHG TLAAS Unrounded 4 Decimal	The Verify-calculated final average GHG TLAAS grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Verify	Back End	Assigned			New LD-FE-CA-BR068	Required if Model Year >=2012
CA-75 (New)	EPA Calculated Final Truck CAFE Unrounded 4 Decimal	The Verify-calculated final truck CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Verify	Back End	Assigned			New LD-FE-CA-BR069	Required if CAFE/GHG Compliance Category = Light Truck
CA-76 (New)	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The Verify-calculated final domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Verify	Back End	Assigned			New LD-FE-CA-BR070	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-77 (New)	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The Verify-calculated final import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999						Verify	Back End	Assigned			New LD-FE-CA-BR071	Required if CAFE/GHG Compliance Category = Passenger Vehicle
Delete: CA-7	EPA Average FE Rounded Unadjusted 1 Decimal	The Verify-calculated average Fuel Economy value for this compliance category. The FE value is not adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 1 decimal place according to the rounding method as specified in ASTM E29-67. For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual fuel, alternate fueled vehicles for the applicable model year (Maximum credit allowed: 1.3 mpg for MY 1993-2010, 0.8 mpg for MY 2011- 2014, ref: Energy Policy Act of 2005, Section 772-(b)(1)(3)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.3 credit allowed in the 2010 model year.			TRUE	1 per CAFE	N(3,1)	Decimal				3	1	0	99.9		Light-Duty	FE CAFE			Verify	Back End	Assigned					
CA-144 (New)	EPA Calculated Final Average GHG Rounded Whole Number	The Verify-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(i)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Verify	Back End	Assigned			New LD-FE-CA-BR072	Required if Model Year >=2012

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																							
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																											
CA-145 (New)	EPA Calculated Final Average GHG TLAAS Rounded Whole Number	The Verify-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(b)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999							Verify	Back End	Assigned			New LD-FE-CA-BR073	Required if Model Year >=2012
CA-79 (New)	EPA Calculated Final Truck CAFE Rounded 1 Decimal	The Verify-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place for this CAFE/GHG Compliance Category (CA-4). The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Verify	Back End	Assigned			New LD-FE-CA-BR074	Required if CAFE/GHG Compliance Category = Light Truck
~~Delete: CA-81~~	~~EPA Average Passenger Vehicle FE Unrounded TPA Adjusted 5 Decimal~~	~~The Verify-calculated TPA adjusted average Fuel Economy value that has been truncated to 5 decimal places for this passenger automobile compliance category. The FE value does not contain the credit for production of dual fuel, alternate fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places.~~			~~FALSE~~	~~1 per CAFE~~	~~N(8,6)~~	~~Decimal~~				~~8~~	~~5~~	~~0~~	~~99.999999~~		~~Light Duty~~	~~FE CAFE~~			~~Verify~~	~~Back End~~	~~Assigned~~			~~Calculation required when CAFE Compliance category (CA-4) = 'DP' or 'IP', else, must not be present.~~ ~~(Present only if CA-4 <>LT)~~
~~Delete: CA-82~~	~~EPA Average Passenger Vehicle FE Unrounded TPA Adjusted 4 Decimal~~	~~The Verify-calculated TPA adjusted average Fuel Economy value that has been truncated to 5 decimal places then rounded to 4 decimal places for this passenger automobile compliance category. The FE value does not contain the credit for production of dual fuel, alternate fuel vehicles for the applicable model year, is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 4 decimal places.~~			~~FALSE~~	~~1 per CAFE~~	~~N(6,4)~~	~~Decimal~~				~~6~~	~~4~~	~~0~~	~~99.9999~~		~~Light Duty~~	~~FE CAFE~~			~~Verify~~	~~Back End~~	~~Assigned~~			~~Calculation required when CAFE Compliance category (CA-4) = 'DP' or 'IP', else, must not be present.~~ ~~(Present only if CA-4 <>LT)~~
CA-82 (New)	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Test Prodedure Adjusted 4 Decimal	The Verify-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR075	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-83 (New)	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	The Verify-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Verify	Back End	Assigned			New LD-FE-CA-BR076	Required if CAFE/GHG Compliance Category = Passenger Vehicle
~~Delete: CA-84~~	~~EPA Average FE Rounded TPA Adjusted 1 Decimal~~	~~The Verify-calculated TPA adjusted average Fuel Economy value for this passenger automobile compliance category. The FE value is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 1 decimal places.~~ ~~For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual fuel, alternate fuel vehicles for the applicable model year (Maximum credit allowed: 1.3 mpg for MY 1983-2010, 0.8 mpg for MY 2011- 2014, ref. Energy Policy Act of 2005, Section 773-(b)(1)(E)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.3 credit allowed in the 2010 model year.~~			~~FALSE~~	~~1 per CAFE~~	~~N(3,1)~~	~~Decimal~~				~~3~~	~~1~~	~~0~~	~~99.9~~		~~Light Duty~~	~~FE CAFE~~			~~Verify~~	~~Back End~~	~~Assigned~~			~~Calculation required when CAFE Compliance category (CA-4) = 'DP' or 'IP', else, must not be present.~~ ~~(Present only if CA-4 <>LT)~~
CA-96 (New)	EPA Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The Verify-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Verify	Back End	Assigned			New LD-FE-CA-BR077	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-87 (New)	EPA Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The Verify-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Verify	Back End	Assigned			New LD-FE-CA-BR078	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: Mfr Final Calculation Results (includes dual-fuel, alternate fuel incentive credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.																											
~~Delete: EA-5.9~~	~~Mfr Average FE Unrounded Unadjusted 4 Decimal~~	~~Enter the manufacturer calculated average fuel economy miles per gallon value for this compliance category. This FE value is not adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 5 decimal places then rounded to 4 decimal places according to the rounding method as specified in ASTM E29-67.~~ ~~For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual fuel, alternate fuel vehicles for the applicable model year (Maximum credit allowed: 1.3 mpg for MY 1983-2010, 0.8 mpg for MY 2011- 2014, ref. Energy Policy Act of 2005, Section 773-(b)(1)(E)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.3 credit allowed in the 2010 model year.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~Manufacturer AveragetotvoundedUnadjustedValue~~	~~TRUE~~	~~1 per CAFE~~	~~N(6,4)~~	~~Decimal~~				~~6~~	~~4~~	~~0~~	~~99.9999~~		~~Light Duty~~	~~FE CAFE~~			~~Mfr~~	~~Front End~~	~~XML~~				

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-146 (New)	Manufacturer Calculated Final Average GHG Unrounded 4 Decimal	The manufacturer-calculated final average GHG grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(j)).			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR079	Required if Model Year >=2012
CA-147 (New)	Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal	The manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to 4 decimal places for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(j)).			FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR080	Required if Model Year >=2012
CA-72 (New)	Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal	The manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails/FinalTruckDetails	Unrounded4Value	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR081	Required if CAFE/GHG Compliance Category = Light Truck
CA-73 (New)	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated final domestic passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/FinalVehicleDetails	UnroundedUnadjusted4Value	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR082	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-74 (New)	Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	The manufacturer-calculated final import passenger vehicle CAFE miles per gallon value that has been rounded to 4 decimal places. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). The CAFE value is NOT adjusted for the test procedure adjustment specified in 40 CFR 600.510-08(e). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails/FinalVehicleDetails	UnroundedUnadjusted4Value	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR083	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-148 (New)	Manufacturer Calculated Final Average GHG Rounded Whole Number	The manufacturer-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(j)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999							Mfr	Front End	XML			New LD-FE-CA-BR084	Required if Model Year >=2012
CA-149 (New)	Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number	The manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(j)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999							Mfr	Front End	XML			New LD-FE-CA-BR085	Required if Model Year >=2012
CA-150 (New)	Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal	The manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles, but is NOT capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails/FinalTruckDetails	Rounded1Value	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Mfr	Front End	XML			New LD-FE-CA-BR086	Required if CAFE/GHG Compliance Category = Light Truck
CA-80 (New)	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	The manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/FinalVehicleDetails	UnroundedAdjusted4Value	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR087	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-81 (New)	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	The manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 4 decimal places. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails/FinalVehicleDetails	UnroundedAdjusted4Value	FALSE	1 per CAFE/GHG compliance category	N(8,4)	Decimal				8	4	0	9999.9999							Mfr	Front End	XML			New LD-FE-CA-BR088	Required if CAFE/GHG Compliance Category = Passenger Vehicle
~~Delete: CA-15~~	~~Mfr Average FE Rounded TPA Adjusted 1 Decimal~~	~~The manufacturer calculated TPA adjusted average Fuel Economy value for this passenger automobile compliance category. The FE value is adjusted by the Test Procedure Adjustment specified in 40 CFR 600.510-08 (e) but is truncated to 1 decimal places than rounded to 1 decimal places.~~ ~~For easier data verification, the manufacturer calculated average mpg value entered is allowed to contain the extra mpg credit, where applicable, that may exceed the maximum allowable credit for production of dual fuel, alternate fuel vehicles for the applicable model year. (Maximum credit allowed: 1.2 mpg for MY 1993-2019, 1.0 mpg for MY 2011- 2014, ref. Energy Policy Act of 2005, Section 772 (b)(1)(A)(2)). The Official CAFE mpg value is the final CAFE mpg which, for example, may not exceed the 1.2 credit allowed in the 2019 model year.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~ManufacturerAveragedUnroundedAdjustedValue~~	~~FALSE~~	~~1 per CAFE~~	~~N(3,1)~~	~~Decimal~~				~~3~~	~~1~~	~~0~~	~~99.9~~		~~Light Duty~~	~~FE CAFE~~		~~Mfr~~	~~Front End~~	~~XML~~				
CA-84 (New)	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails/FinalVehicleDetails	RoundedAdjustedValue	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9							Mfr	Front End	XML			New LD-FE-CA-BR089	Required if CAFE/GHG Compliance Category = Passenger Vehicle

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Val ida tio n	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-85 (New)	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	The manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is NOT capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails	RoundedAdjusted1Value	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML			New LD-FE-CA-BR090	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: EPA's Official Calculation Results (includes "capped" alternative-fuel, dual-fuel credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.																										
CA-151 (New)	EPA Official Average GHG Grams Per Mile	The official Verify-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(l)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Verify	Back End	Assigned			New LD-FE-CA-BR091	Required if Model Year >=2012
CA-152 (New)	EPA Official Average GHG TLAAS Grams Per Mile	The official Verify-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(l)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Verify	Back End	Assigned			New LD-FE-CA-BR092	Required if Model Year >=2012
CA-91 (New)	EPA Official Truck CAFE Miles Per Gallon	The official Verify-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The CAFE value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR093	Required if CAFE/GHG Compliance Category = Light Truck
CA-92 (New)	EPA Official Domestic Passenger Vehicle CAFE Miles Per Gallon	The official Verify-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR094	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-93 (New)	EPA Official Import Passenger Vehicle CAFE Miles Per Gallon	The official Verify-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.			FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR095	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CAFE & GHG Information: Mfr's Official Calculation Results (includes "capped" alternative-fuel, dual-fuel credits) Note: All CAFE and GHG calculations use ASTM-E29 rounding.																										
~~Delete: CA-9~~	~~Manufacturer Final CAFE Miles Per Gallon~~ ~~Official CAFE Miles Per Gallon~~	~~Enter the Official Corporate Average Fuel Economy in miles per gallon for this CAFE compliance category. It may include the credit, where applicable, up to the maximum allowable mpg value for production of dual fuel, alternate fuel vehicles. (Maximum credit allowed: 1.2 mpg for MY 1993-2010; 0.8 mpg for MY 2011- 2014, ref: Energy Policy Act of 2005, Section 773 (b)(1)(A-D))~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails~~	~~OfficialMfrPerGallonValue~~	~~TRUE~~	~~1. per CAFE~~	~~N(3,1)~~	~~Decimal~~				~~3~~	~~1~~	~~0~~	~~99.9~~		~~Light Duty~~	~~FE CAFE~~			~~Mfr~~	~~Front End~~	~~XML~~				
CA-153 (New)	Manufacturer Calculated Official Average GHG Grams Per Mile	The official manufacturer-calculated final average GHG grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(l)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Mfr	Front End	XML			New LD-FE-CA-BR096	Required if Model Year >=2012
CA-154 (New)	Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile	The official manufacturer-calculated final average GHG TLAAS grams per mile value that has been rounded to a whole number for this CAFE/GHG Compliance Category (CA-4). The average GHG value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The average GHG value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(l)).			FALSE	1 per CAFE/GHG compliance category	N(4,0)	Integer				4	0	0	9999						Mfr	Front End	XML			New LD-FE-CA-BR097	Required if Model Year >=2012
CA-88 (New)	Manufacturer Calculated Official Truck CAFE Miles Per Gallon	The official manufacturer-calculated final truck CAFE miles per gallon value that has been rounded to 1 decimal place. The CAFE value contains the incentive credit for dual-fuel, alternate-fueled vehicles. The CAFE value is capped to the maximum credit allowed for the model year (40 CFR 600.510-12(h)). Required for all truck submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerTruckDetails	OfficialMPGValue	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML			New LD-FE-CA-BR098	Required if CAFE/GHG Compliance Category = Light Truck
CA-89 (New)	Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon	The official manufacturer-calculated final domestic passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerDomesticPassengerVehicleDetails	OfficialMPGValue	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML			New LD-FE-CA-BR099	Required if CAFE/GHG Compliance Category = Passenger Vehicle
CA-90 (New)	Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon	The official manufacturer-calculated final import passenger vehicle test procedure adjusted CAFE value that has been rounded to 1 decimal place. The CAFE value contains the credit for production of dual-fuel, alternate-fuel vehicles. The CAFE value is adjusted by the test procedure adjustment specified in 40 CFR 600.510-08 (e). The CAFE value is capped to the maximum allowed credit for the model year (40 CFR 600.510-12(h)). Required for all passenger vehicle submissions.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ManufacturerImportedPassengerVehicleDetails	OfficialMPGValue	FALSE	1 per CAFE/GHG compliance category	N(5,1)	Decimal				5	1	0	9999.9						Mfr	Front End	XML			New LD-FE-CA-BR100	Required if CAFE/GHG Compliance Category = Passenger Vehicle
Applicable CAFE Standard for Each CAFE Compliance Category (Including parameters needed to generate Light-Duty Truck reformed CAFE standards for an individual mfr for MY 2010 and later)																										
CA-10	CAFE Standard Type	Enter the applicable CAFE standard type for this CAFE Compliance Category.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails	StandardTypeIndicator	FALSE	1. per CAFE	A(1)	Enumeration								R = Reformed CAFE U = Unreformed CAFE (existing requirements)	Light Duty	FE CAFE			Mfr	Front End	XML			**Delete LD-FE-CA-BR003** **Update LD-FE-CA-BR004**	~~Required for CAFE Compliance Category (CA-4) = 'LT' and not allowed for 'DP' or 'P'.~~ For MY 2011 and beyond, ~~when CAFE Compliance Category (CA-4) = 'LT',~~ CAFE Type Indicator must = 'R'.

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																							
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																											
CA-11	**CAFE Standard**	The applicable CAFE standard for this CAFE compliance category.			TRUE	1.. per CAFE	N(3,1)	Decimal				3	1	0	99.9		Light Duty	FE CAFE		Send an annual (on Jan. 2) email notification to the EPA fuel economy team to check or update the CAFE Standard (passenger vehicle) or parameters related with any truck CAFE standard calculations. If CAFE Type Indicator (CA-10) = 'R' then this value is pulled from EPA Calculated Final Reformed CAFE Standard (CA-22.7), else if CA-10 = 'U' then look-up from CAFE Standards by Model Year and Compliance Category table.	Verify	Back End	Assigned				For CAFE Compliance Category (CA-4) = 'DP' or 'IP', this value must equal the value in the back end look-up table "Passenger Vehicle CAFE Standards by Model Year" (currently it's a constant of 27.5 mpg for all MYs but may change in the future). For CAFE Compliance Category (CA-4) = 'LT', this value must be equal to the EPA CAFE Standard value for this category: a) For CAFE Type Indicator (CA-10) = 'U', check the back end look-up table "Unreformed Truck CAFE STD by MY". b) For CAFE Type Indicator (CA-10) = 'R', compare with EPA-calculated CAFE standard value (CA-22).
	Reformed CAFE Standard Calculation															CA-14 through CA-23 required if CAFE Type Indicator (CA-10) = 'R', else not allowed.											
CA-14	**Model Type Index**	Enter the applicable Model Type Index for this CAFE submission.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/EPAGeneratedFuelEconomyCAFEDetails/EPAReformedModelTypeDetails	ModelTypeIndexNumber	FALSE	1..n (1 for each Model Type for this CAFE.)	N(3)	Integer						1	999		Light Duty	FE CAFE		Verify will reference FE Label information by the primary key = Model Year (CA-1) + Mfr Code (CA-0) + Model Type Index (CA-14).	~~Verify~~ Mfr	~~Backend~~ Front End	~~Pre-existing~~ XML			LD-FE-CA-BR005a LD-FE-CA-BR005b LD-FE-CA-BR005c LD-FE-CA-BR005d LD-FE-CA-BR006 LD-FE-CA-BR022	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-14.5	**Carline Manufacturer Code**	The carline manufacturer code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).		EPAManufacturerCode	FALSE	1..n (1 for each Model Type for this CAFE.)	A(3)	String	3	3							Light Duty	FE CAFE		GL-10	Verify	Back End	Pre-existing data			New LD-FE-CA-BR138	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-12	**Division Code**	The division code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails/FinalModelYearProductionDetails	ManufacturerDivisionCode	FALSE	1..n (1 for each Model Type for this CAFE.)	N(2)	Integer						1	99		Light Duty	FE CAFE		GL-11	Verify	Back End	Pre-existing data			New LD-FE-CA-BR139	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-13	**Carline Code**	The carline code derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails/FinalModelYearProductionDetails	CarlineCode	FALSE	1..n (1 for each Model Type for this CAFE.)	N(3)	Integer						1	999		Light Duty	FE CAFE		GL-12	Verify	Back End	Pre-existing data			New LD-FE-CA-BR140	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-14.1	~~Basic Engine Index~~ Test Group	The ~~basic engine index~~ test group derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).			FALSE	1..n (1 for each Model Type for this CAFE.)	A(12)	Fixed String	12	12				~~1~~	~~999~~		Light Duty	FE CAFE		GL-13.5	Verify	Back End	Pre-existing data			New LD-FE-CA-BR141	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-14.2	**Transmission Class Index**	The transmission class index derived from the FE Label information referenced by the combination of Model Year (CA-1), Mfr Code (CA-0), and Model Type Index (CA-14).			FALSE	1..n (1 for each Model Type for this CAFE.)	N(3)	Integer						1	999		Light Duty	FE CAFE		GL-66	Verify	Back End	Pre-existing data			New LD-FE-CA-BR142	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-155 (New)	CAFE Domestic/Import Indicator	Enter the applicable domestic or import indicator for this Model Type Index. This is required for passenger vehicle CAFE calculations.			FALSE	1..n (1 for each Model Type for this CAFE.)	A(1)	Enumeration								D = Domestic I = Import	Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR101	Required if Compliance category is equal to Passenger Vehicle, otherwise not allowed
CA-156 (New)	GHG TLAAS Indicator	Is this Model Type Index to be included in GHG TLAAS calculations?			FALSE	1..n (1 for each Model Type for this CAFE/GHG.)	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR102	Required if Model Year >=2012
CA-157 (New)	GHG Advanced Technology Indicator	Is this Model Type Index a fuel cell vehicle, EV or PHEV ?			FALSE	1..n (1 for each Model Type for this CAFE/GHG.)	A(1)	Enumeration								Y = Yes N = No	Light Duty	FE CAFE		Where is this data coming from. (Calculation?, other dataset?)	Verify	Back End	Pre-existing data			New LD-FE-CA-BR103	Required if Model Year >=2012
CA-14.5	**Footprint Index**	Verify-generated Enter the applicable footprint index.		FootprintIndexNumber	FALSE	1..n (1 for each footprint per Model Type)	N(2)	Integer				2	0	1	99		Light Duty	FE CAFE		FT-5	Verify	Back End	Pre-existing data			New LD-FE-CA-BR143	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-15	**Model Type Footprint Description**	Enter the manufacturer's model type and footprint description (e.g. "super cab, 4WD, long bed, Dooley"; "super cab, 2WD, short bed", etc.) . Repeat for each footprint within this model type index.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	A(300)	string	1	300							Light Duty	FE CAFE		FT-6	Verify	Back End	Pre-existing data			New LD-FE-CA-BR144	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-158 (New)	Footprint Final Model Year GHG Production Units	Enter the final model year greenhouse gas production units of this footprint for this model type.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE/GHG.)	N(7)	Integer				7	0	1	9999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			New LD-FE-CA-BR104	Required if Model Year >=2012
CA-20	**Footprint Final Model Year FE Production Units**	Enter the final model year fuel economy production units of this footprint for this model type.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails/FinalModelYearProductionDetails	FinalModelYearProductionNumber	FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(7)	Integer				7	0	1	9999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHG/CREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			LD-FE-CA-BR007 New LD-FE-CA-BR145	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-16	**Wheel base (inches)**	Enter the wheel base of this footprint for this model type measured in inches and rounded to one tenth of an inch.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(5,1)	Decimal				5	1	0.1	9999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			New LD-FE-CA-BR146	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-17	**Front Track Width (inches)**	Enter the front track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			New LD-FE-CA-BR147	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-18	**Rear Track Width (inches)**	Enter the rear track width of this footprint for this model type measured in inches and rounded to one tenth of an inch.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE CAFE			Verify	Back End	Pre-existing data			New LD-FE-CA-BR148	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-19	**Footprint (square feet)**	The Verify-calculated area of this footprint for this model type according to the footprint definition specified in 49 CFR 523.2.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(4,1)	Decimal				4	1	0.1	999.9		Light Duty	FE CAFE		Verify should calculate the footprint and display it on the front end using the following equation: Footprint = (((Front Track Width (CA-17) + Rear Track Width (CA-18)) / 2) * Wheelbase (CA-16)) / 144 rounded to one tenth of a square foot using ASTM rounding procedures. The result should then be stored on the back end. Any changes to CA-17, CA-18 or CA-16 should trigger a recalculation of this value.	Verify	Back End	Pre-existing data			New LD-FE-CA-BR149	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-159 (New)	EPA Calculated Footprint Target GHG Value (grams per mile)	Enter the EPA-calculated target greenhouse gas value (in grams per mile) of this footprint for this model type. The EPA-calculated value will be the official value used to calculate the GHG standard for this compliance category.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE/GHG.)	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	FE CAFE		Verify should compare this value with the EPA-calculated value (CA-21.5) and report any discrepancy in the submission processing report sent to the mfr. The discrepancy status should be stored and displayed on the back end.	Verify	Backend	Pre-existing Data			New LD-FE-CA-BR105	Required if Model Year >=2012
~~Delete: CA-21~~	~~Manufacturer Calculated Footprint Target FE Value (miles per gallon)~~	~~Enter the manufacturer calculated target fuel economy value (in miles per gallon) of this footprint for this model type. The EPA calculated value will be the official value used to calculate the CAFE standard for this compliance category.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails/ReformedModelTypeDetails/ModelTypeFootprintDetails~~	~~TargetMiscPerGallonValue~~	~~FALSE~~	~~1..n (1 for each footprint within each Model Type for this CAFE.)~~	~~N(5,2)~~	~~Decimal~~				~~5~~	~~2~~	~~0.01~~	~~999.99~~		~~Light Duty~~	~~FE CAFE~~		~~Verify should compare this value with the EPA-calculated value (CA-21.5) and report any discrepancy in the submission processing report sent to the mfr. The discrepancy status should be stored and displayed on the back end.~~	~~Verify~~ Mfr	~~Backend~~ ~~Front End~~	~~Pre-existing Data~~ XML			Delete LD-FE-CA-BR007a, Delete LD-FE-CA-BR007b, Delete LD-FE-CA-BR007c	~~Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.~~

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-21.5	**EPA Calculated Footprint Target FE Value (miles per gallon)**	The EPA-calculated target fuel economy value (in miles per gallon) of this footprint for this model type. This will be the official value used to calculate the CAFE standard for this compliance category.			FALSE	1..n (1 for each footprint within each Model Type for this CAFE.)	N(5,2)	Decimal				5	2	0.01	999.99		Light Duty	FE CAFE	**FT-14**	Verify should compare this value with the mfr-calculated value (CA-21) and report any discrepancy in the submission processing report sent to the mfr. The discrepancy status should be stored and displayed on the back end. See separate FE calculation document for the equation as well as the table of required coefficients (Section 533.3, Table V – Parameters for the Reformed CAFE FE Targets) by model year. This table should be modifiable by EPA.	Verify	Back End	Pre-existing Data Assigned			New LD-FE-CA-BR150	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
~~CA-21.7~~	~~EPA Calculated Footprint Target FE Discrepancy Value~~	~~The EPA-calculated discrepancy between the manufacturer and EPA Target FE values.~~			~~FALSE~~	~~1..n (1 for each footprint within each Model Type for this CAFE.)~~	~~N(9,3)~~	~~Decimal~~				~~6~~	~~3~~	~~-999.99~~	~~999.99~~		~~Light Duty~~	~~FE CAFE~~		~~This value is the difference between the EPA footprint target FE value (CA 21.5) and the mfr footprint target FE value (CA 21).~~ ~~footprintTargetFEdiscrepancyValue (CA-21.7) = (CA 21.5) - (CA 21)~~	~~Verify~~	~~Back End~~	~~Pre-existing Data~~ ~~Assigned~~				~~Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.~~
CA-160 (New)	Manufacturer Calculated Unrounded GHG Standard	Enter the manufacturer calculated unrounded GHG standard for this compliance category.			FALSE	1.. per CAFE	N(5,1)	Decimal				5	1	0.0	9999.9		Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR154	Required if Model Year >=2012
CA-161 (New)	EPA Calculated Unrounded GHG Standard	The EPA calculated unrounded GHG standard for this compliance category.			FALSE	1.. per CAFE	N(5,1)	Decimal				5	1	0.0	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned			New LD-FE-CA-BR106	Required if Model Year >=2012
CA-162 (New)	EPA Calculated Unrounded GHG Standard Discrepancy Value	The EPA-calculated discrepancy between the manufacturer and EPA calculated GHG standards.			FALSE	1.. per CAFE	N(5,1)	Decimal				5	1	-9999.9	9999.9		Light Duty	FE CAFE			Verify	Back End	Assigned			New LD-FE-CA-BR0107	Required if Model Year >=2012
CA-163 (New)	EPA Calculated Final GHG Standard	The EPA calculated final GHG standard for this compliance category that has been rounded to a whole number.			FALSE	1.. per CAFE	N(4,0)	Integer				4	0	0	9999		Light Duty	FE CAFE			Verify	Back End	Assigned			New LD-FE-CA-BR0108	Required if Model Year >=2012
CA-164 (New)	Manufacturer GHG Comments	Enter any comments for this GHG.			FALSE	1.. per CAFE	A(1000)	string	1	1000							Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR109	Required if Model Year >=2012
CA-22.3	Manufacturer Mfr-Calculated Unrounded Reformed CAFE Standard	Enter the manufacturer calculated unrounded reformed CAFE standard for this compliance category.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails	ManufacturerCalculatedUnroundedReformedStandardValue	FALSE	1.. per CAFE	N(7,4)	Decimal				7	4	0.0000	999.9999		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR018	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-22	EPA Calculated Unrounded Reformed CAFE Standard	The EPA calculated unrounded reformed CAFE standard for this compliance category.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/EPAGeneratedFuelEconomyCAFEDetails	CalculatedUnboundledReformedStandardValue	FALSE	1.. per CAFE	N(7,4)	Decimal				7	4	0.0000	999.9999		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned			New LD-FE-CA-BR151	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-22.5	EPA Calculated Unrounded Reformed CAFE Standard Discrepancy Value	The EPA-calculated discrepancy between the manufacturer and EPA calculated reformed CAFE standards.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/EPAGeneratedFuelEconomyCAFEDetails	CalculatedReformedDiscrepancyValue	FALSE	1.. per CAFE	N(7,4)	Decimal				7	4	-999.9999	999.9999		Light Duty	FE CAFE		This value is the difference between the EPA Calculated Unrounded Reformed CAFE Standard (CA-22) and the Mfr Calculated Unrounded Reformed CAFE Standard (CA-21). calcReformCAFEdiscrepancyValue (CA-22.5) = (CA-22) - (CA-22.3)	Verify	Back End	Assigned			New LD-FE-CA-BR152	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-22.7	EPA Calculated Final Reformed CAFE Standard	The EPA calculated final reformed CAFE standard for this compliance category that has been rounded to one decimal place.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/EPAGeneratedFuelEconomyCAFEDetails	CalculatedFinalReformedStandardValue	FALSE	1.. per CAFE	N(4,1)	Decimal				4	1	0.0000	999.9999		Light Duty	FE CAFE		See separate FE calculation document for the equation.	Verify	Back End	Assigned			New LD-FE-CA-BR153	Required if CAFE Type Indicator (CA-10) = 'R', else not allowed.
CA-23	Manufacturer Reformed CAFE Comments	Enter any comments for this reformed CAFE.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/ReformedStandardCalculationDetails	ManufacturerReformedCommentsText	FALSE	1.. per CAFE	A(1000)	string	1	1000							Light Duty	FE CAFE			Mfr	Front End	XML				
CAFE Calculation Information (Model Type Information – a unique combination of CarLine, Basic Engine and Transmission Class (Note- all of the Model Type description info submitted in FE Label will be used for CAFE, even though it is not shown here with the CAFE data requirements))																										
NEW CA-25.1	Carline Manufacturer Code	Enter the applicable Carline Manufacturer Code for this Model Type Index.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails	EPAManufacturerCode	TRUE	1..n (1 for each Model Type for this CAFE.)	A(3)	Fixed String									Light Duty	FE CAFE			Mfr	Front End	XML				
CA-25	Model Type Index	Enter the applicable model type index (previously created in FE Label) for this CAFE compliance category. All model type indices created in FE Label for a manufacturer and model year must be used in one of the CAFE compliance categories for that same manufacturer and model year, except for police/emergency model types.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails	ModelTypeIndexNumber	TRUE	1.. n (1 for each Model Type for this CAFE.)	N(3)	Enumeration ~~Integer~~						1	999		Light Duty	FE CAFE		Reference all model type info in FE Label via this model type index (CA-25) + mfr code (CA-0) + model year (CA-1).	Mfr	Front End	XML			LD-FE-CA-BR008	Model Type Index (CA-25) + Mfr Code (CA-0) + Model Year (CA-1) must exist in FE Label.
Verify Calculated Model Type Level Fields (Intermediate Calculations)																										
CA-165 (New)	EPA Calculated Baseline Model Type City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR110	Required if Model Year >=2012
CA-166 (New)	EPA Calculated Baseline Model Type Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR111	Required if Model Year >=2012
CA-167 (New)	EPA Calculated Baseline Model Type Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR112	Required if Model Year >=2012
CA-168 (New)	EPA Calculated Baseline Model Type Combined GHG Value Whole Number	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(4,0)	Integer				4	0	0	9999						Verify	Back End	Assigned			New LD-FE-CA-BR113	Required if Model Year >=2012
CA-169 (New)	EPA Calculated Final Model Type City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR114	Required if Model Year >=2012
CA-170 (New)	EPA Calculated Final Model Type Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR115	Required if Model Year >=2012
CA-171 (New)	EPA Calculated Final Model Type Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR116	Required if Model Year >=2012
CA-172 (New)	EPA Calculated Final Model Type Combined GHG Value Whole Number	Verify calculated intermediate calculation.			FALSE	1 per Model type Index	N(4,0)	Integer				4	0	0	9999						Verify	Back End	Assigned			New LD-FE-CA-BR117	Required if Model Year >=2012
CA-173 (New)	EPA Calculated Model Type GHG Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			FALSE	1 per Model type Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned			New LD-FE-CA-BR118	Required if Model Year >=2012
CA-94 (New)	EPA Calculated Baseline Model Type City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-95 (New)	EPA Calculated Baseline Model Type Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-96 (New)	EPA Calculated Baseline Model Type Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-97 (New)	EPA Calculated Baseline Model Type Combined FE Value 1 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(4,1)	Decimal				4	1	0	999.9						Verify	Back End	Assigned				
CA-98 (New)	EPA Calculated Final Model Type City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																								
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																												
CA-99 (New)	EPA Calculated Final Model Type Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-100 (New)	EPA Calculated Final Model Type Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-101 (New)	EPA Calculated Final Model Type Combined FE Value 1 decimal	Verify calculated intermediate calculation.			TRUE	1 per Model type Index	N(4,1)	Decimal				4	1	0	999.9						Verify	Back End	Assigned				
CA-102 (New)	EPA Calculated Modol Type FE Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			TRUE	1 per Model type Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned				
	Additional CAFE Base Level Info not included in Model Type Indexes (CA-25) (Multiple Base Levels *may* exist within a Model Type)					**Base Level is defined as a "unique combination of Basic Engine, Transmission Class and Inertia Weight Class".(ref: 40 CFR 600.002)**												**(For IT: means a unique combination of BasicEngineIndex, TransmissionClassIndex and Inertia Weight)**								
CA-25.5	**Base Level Index**	Assigned by Verify for each base level (i.e. inertia weight class) created by the manufacturer.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails	BaseLevelIndexNumber	TRUE	1.. n (1 for each base level within a Model Type for this CAFE.)	N(2)	Integer						1	99		Light Duty	FE CAFE		Assigned by Verify as a sequential incrementer for each base level (i.e. inertia weight class) entered by the mfr. Data elements GL-110 through GL-116 make this a repeating dataset.	Verify	Front End	XML				
CA-25.6	**Inertia Weight Class**	Inertia Weight Class (ref: 40 CFR 600.002-08): means the class, which is a group of test weights, into which a vehicle is grouped based on is loaded vehicle weight in accordance with the provisions of 40 CFR 86.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails	InertiaWeightClassNumber	TRUE	1.. n (1 for each base level within a Model Type for this CAFE.)	N(5)	Integer						0	99999		Light Duty	FE CAFE		Mfrs must enter this so EPA knows which configuration and subconfiguration for which they are adding new tests for CAFE purposes. GL-110	Mfr	Front End	XML			LD-FE-CA-BR023	
Verify-Calculated Base Level Fields (Intermediate Calculations)																												
CA-174 (New)	EPA Calculated Baseline Base Level City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR155	Required if Model Year >=2012
CA-175 (New)	EPA Calculated Baseline Base Level Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR119	Required if Model Year >=2012
CA-176 (New)	EPA Calculated Baseline Base Level Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR120	Required if Model Year >=2012
CA-177 (New)	EPA Calculated Final Base Level City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR121	Required if Model Year >=2012
CA-178 (New)	EPA Calculated Final Base Level Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR122	Required if Model Year >=2012
CA-179 (New)	EPA Calculated Final Base Level Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Base Level Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR123	Required if Model Year >=2012
CA-180 (New)	EPA Calculated Base Level GHG Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			FALSE	1 per Base Level Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned			New LD-FE-CA-BR124	Required if Model Year >=2012
CA-103 (New)	EPA Calculated Baseline Base Level City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-104 (New)	EPA Calculated Baseline Base Level Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-105 (New)	EPA Calculated Baseline Base Level Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-106 (New)	EPA Calculated Final Base Level City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-107 (New)	EPA Calculated Final Base Level Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-108 (New)	EPA Calculated Final Base Level Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Base Level Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-109 (New)	EPA Calculated Base Level FE Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			TRUE	1 per Base Level Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned				
	Configuration Info (Multiple Configurations may exist within a Base Level) - unique combination of Engine Code, Axle Ratio and Transmission Configuration within a Base Level																											
CA-26	**Configuration Index**	Enter the new configuration index number assigned by the manufacturer that has not already been entered in FE Label to identify each configuration within a Base Level that contains a unique combination of Engine Code, Axle Ratio and Transmission Configuration. Manufacturers should assign the code as specified below: 001-499: A portion of this configuration is represented by a test vehicle. 501-999: No portion of this configuration is represented by a test vehicle. (Formerly "DVC" (Data vehicle code) in CFEIS.)	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails	ConfigurationIndexNumber	FALSE	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3)	Integer				3	0	1	999		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR024 LD-FE-CA-BR028	
CA-27	**Transmission Configuration Code**	Enter the Transmission Configuration Code assigned by the manufacturer for this Configuration. 1. The Transmission Configuration Code is used to distinguish a unique transmission configuration within a Transmission Class. Manufacturers may assign the code alphanumerically up to two characters (e.g. '1', 'A', '02', 'A2', '3B', etc.). 2. For a definition of Transmission Configuration, see 40 CFR 600.002-08 and A/C 83A. 3. This data element replaces all of the CFEIS "FR" and "FL" data elements and is functionally equivalent to the CFEIS "Transmission Configuration Link" data element.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails	Transmission Configuration Code	FALSE	1..n (1 for each Configuration within each Base Level within a Model Type)	A(2)	String	1	2	(A-Z0-9){1,2}						Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR026 LD-FE-CA-BR028	
CA-28	**Engine Code**	Enter the Engine Code for this Configuration which is used to distinguish a unique combination of displacement, fuel delivery system, calibration, emission control, ... within a Engine system combination (ref: 40 CFR 600.002-08).	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails	EngineCodeText	FALSE	1..n (1 for each Configuration within each Base Level within a Model Type)	A(1,4)	String	1	14							Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR026 LD-FE-CA-BR028	
CA-29	**Axle Ratio**	Enter the axle ratio for this Configuration.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails	AxleRatioValue	FALSE	1..n (1 for each Configuration within each Base Level within a Model Type)	N(3,2)	Decimal				3	2	0.01	9.99		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR026 LD-FE-CA-BR028	
Verify-Calculated Configuration Level Fields (Intermediate Calculations)																												
CA-181 (New)	EPA Calculated Baseline Configuration City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR125	Required if Model Year >=2012
CA-182 (New)	EPA Calculated Baseline Configuration Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR126	Required if Model Year >=2012
CA-183 (New)	EPA Calculated Baseline Configuration Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR127	Required if Model Year >=2012

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																							
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																											
CA-184 (New)	EPA Calculated Final Configuration City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR128	Required if Model Year >=2012
CA-185 (New)	EPA Calculated Final Configuration Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR129	Required if Model Year >=2012
CA-186 (New)	EPA Calculated Final Configuration Combined GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Configuration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR130	Required if Model Year >=2012
CA-187 (New)	EPA Calculated Configuration GHG Production Units	Verify calculated intermediate calculation. Based on production units from the subconfiguration production units entries.			FALSE	1 per Configuration Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned				
CA-110 (New)	EPA Calculated Baseline Configuration City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-111 (New)	EPA Calculated Baseline Configuration Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-112 (New)	EPA Calculated Baseline Configuration Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-113 (New)	EPA Calculated Final Configuration City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-114 (New)	EPA Calculated Final Configuration Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-115 (New)	EPA Calculated Final Configuration Combined FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Configuration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-116 (New)	EPA Calculated Configuration FE Production Units	Verify calculated intermediate calculation. Based on production units from the subconfiguration production units entries.			TRUE	1 per Configuration Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned				
Subconfiguration Info (Multiple Subconfigurations may exist within a Configuration Level) - unique combination of ETW and RLHP within a configuration Level																											
CA-29.5	Subconfiguration Index	Enter the index number assigned by the manufacturer to identify this subconfiguration that has not already been entered in FE Label within a configuration. Subconfiguration Index is used to identify each subconfiguration within a configuration that contains a unique combination of equivalent test weight and road load horse power. Manufacturers should assign this code as specified below: 01-49: for a subconfiguration represented by a test vehicle. 51-99: for a subconfiguration not represented by a test vehicle. (Formerly "RLC" (Road Load Code) in CFEIS.)	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	SubConfigurationIndexNumber	FALSE	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer				2		1	99		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR025 LD-FE-CA-BR029	
CA-30	Total Road Load Horsepower	Enter the total road load horsepower at 50 mph (TRLHP50).	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	RoadLoadHorsepowerValue	FALSE	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,1)	Decimal				3	1	0	99.9		Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR027 LD-FE-CA-BR029	
CA-31	Equivalent Test Weight (ETW)	Enter the Equivalent Test Weight (ETW) within a specified Inertia Weight Class.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails	EquivalentTestWeightValue	FALSE	1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(5)	Enumeration ~~Integer~~						~~0~~	~~9999~~	1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, ~~2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875,~~ 3000, 3125, 3250, 3375, 3500, ~~3625, 3750, 3875,~~ 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000	Light Duty	FE CAFE			Mfr	Front End	XML			LD-FE-CA-BR027 LD-FE-CA-BR029	~~Must be a valid Equivalent Test Weight (ETW) within a specified Inertia Weight Class as defined in paragraph 49 CFR 86.129~~
~~CA-33 Delete~~	~~Altitude Code~~	~~Enter the altitude for which the vehicles within this subconfiguration are offered for sale.~~	~~FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails~~	~~SaleAltitudeCode~~	~~FALSE~~	~~1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)~~	~~A(3)~~	~~Enumeration~~								~~A = All altitude L = Low altitude only H = High altitude only~~	~~Light Duty~~	~~FE CAFE~~			~~Mfr~~	~~Front End~~	~~XML~~				
Verify-Calculated Subconfiguration Level Fields (Intermediate Calculations)																											
CA-188 (New)	EPA Calculated Baseline Subconfiguration City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Subconfiguration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR131	Required if Model Year >=2012
CA-189 (New)	EPA Calculated Baseline Subconfiguration Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Subconfiguration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR132	Required if Model Year >=2012
CA-190 (New)	EPA Calculated Final Subconfiguration City GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Subconfiguration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR133	Required if Model Year >=2012
CA-191 (New)	EPA Calculated Final Subconfiguration Highway GHG Value 1 decimal	Verify calculated intermediate calculation.			FALSE	1 per Subconfiguration Index	N(5,1)	Decimal				5	1	0	9999.9						Verify	Back End	Assigned			New LD-FE-CA-BR134	Required if Model Year >=2012
CA-192 (New)	EPA Calculated Subconfiguration GHG Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			FALSE	1 per Subconfiguration Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned			New LD-FE-CA-BR135	Required if Model Year >=2012
CA-117 (New)	EPA Calculated Baseline Subconfiguration City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Subconfiguration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-118 (New)	EPA Calculated Baseline Subconfiguration Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Subconfiguration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
~~CA-119 (New)~~	~~EPA Calculated Baseline Subconfiguration Combined FE Value 4 decimal~~	~~Verify calculated intermediate calculation.~~			~~TRUE~~	~~1 per Subconfiguration Index~~	~~N(7,4)~~	~~Decimal~~				~~7~~	~~4~~	~~0~~	~~999.9999~~				~~Subconfiguration level combined fuel economy is not defined in regulation anywhere, so it was deleted~~	~~Verify~~	~~Back End~~	~~Assigned~~				
CA-120 (New)	EPA Calculated Final Subconfiguration City FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Subconfiguration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
CA-121 (New)	EPA Calculated Final Subconfiguration Highway FE Value 4 decimal	Verify calculated intermediate calculation.			TRUE	1 per Subconfiguration Index	N(7,4)	Decimal				7	4	0	999.9999						Verify	Back End	Assigned				
~~CA-122 (New)~~	~~EPA Calculated Final Subconfiguration Combined FE Value 4 decimal~~	~~Verify calculated intermediate calculation.~~			~~TRUE~~	~~1 per Subconfiguration Index~~	~~N(7,4)~~	~~Decimal~~				~~7~~	~~4~~	~~0~~	~~999.9999~~				~~Subconfiguration level combined fuel economy is not defined in regulation anywhere, so it was deleted~~	~~Verify~~	~~Back End~~	~~Assigned~~				
CA-123 (New)	EPA Calculated Subconfiguration FE Production Units	Verify calculated intermediate calculation. Based on sales from the subconfiguration sales production units entries.			TRUE	1 per Subconfiguration Index	N(7)	Integer				7	0	0	9999999						Verify	Back End	Assigned				
Subconfiguration production units information - Within a subconfiguration, manufacturers must report production units for each combination of Carline (MfrCode, DivCode, CarlineCode) and testgroup.																											

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																											
CA-124 (New)	Manufacturer Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesDetails	EPAManufacturerCode	TRUE	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(3)	String	3	3	[A-Z0-9]{3}										Mfr	Front End	XML				
CA-125 (New)	Division Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesDetails	ManufacturerDivisionCode	TRUE	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer	1	2				1	99						Mfr	Front End	XML				
CA-126 (New)	Carline Code	Enter the applicable manufacturer code for this subconfiguration sales information.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesDetails	CarlineCode	TRUE	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3)	Integer	1	3				1	999						Mfr	Front End	XML				
CA-34	Test Group (This was moved from the subconfiguration level)	Enter the applicable test group name for this subconfiguration.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesDetails	TestGroupName	TRUE	~~1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)~~ (1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String	12	12	[A-H3-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}[\-]{0,1}[A-Z0-9]{1,6}$"						Light Duty	FE CAFE		TG-2, GL-126	Mfr	Front End	XML			LD-FE-CA-BR009	TestGroup must have already been certified.
New: CA-193	Manufacturer Subconfiguration Final Model Year GHG Production Units	Enter the manufacturer-calculated final model year fuel economy production units for this carline and testgroup. This will be used in the GHG calculations.			FALSE	(1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(6)	Integer						1	999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHGCREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc.. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			New LD-FE-CA-BR136	Required if Model Year >=2012
CA-32	Manufacturer Subconfiguration Final Model Year FE Production Units (This was moved from the subconfiguration level and renamed to incl "FE" to distinguish it from GHG production units (will be added in Phase 2))	Enter the manufacturer-calculated final model year fuel economy production units for this carline and testgroup. This will be used in the CAFE calculations.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/SubConfigurationSalesDetails	SubConfigurationFinalModelYearProductionNumber	TRUE	~~1..n (1 for each Subconfiguration within each Configuration within each Base Level within each Model Type)~~ (1 for each Subconfiguration production units row within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(6)	Integer						1	999999		Light Duty	FE CAFE		Note to CSC: The production units that apply to fuel economy (CAFE) may be different than the production units that apply to the GHGCREE calculation. I.E. emergency vehicles, sales in U.S. Territories, etc.. The GHG sales will be added in Phase 2.	Mfr	Front End	XML			LD-FE-CA-BR019	
Test Vehicle Info (Multiple vehicles with multiple tests may exist within a sub-configuration)																											
CA-35	Test Number	Enter an applicable Test Number for this CAFE that was previously assigned by Verify in Test Information. Test Number must be entered when Subconfiguration Index (CA-29) is 1 to 49 and Configuration Index (CA-26) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	TestNumberIdentifier	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(12)	String									Light Duty	FE CAFE		TI-2, GL-127	Mfr	Front End	XML			LD-FE-CA-BR010 LD-FE-CA-BR011a LD-FE-CA-BR011b LD-FE-CA-BR011c LD-FE-CA-BR011d LD-FE-CA-BR012a LD-FE-CA-BR012b LD-FE-CA-BR020 LD-FE-CA-BR030	Test Number must exist in Verify Test Info. Test Number must be present when Subconfiguration Index (CA-29) is 1 to 49 and Configuration Index (CA-26) is 1 to 499 which indicates that the subconfiguration is represented by a tested vehicle. Test Category for this Test Number must = 'FTP', 'US06', 'SC03', 'COLD' or 'HWY'.
CA-36	Vehicle ID	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle			FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(20)	String	1	20							Light Duty	FE CAFE		Find 'Vehicle ID' (TI-4) via Test Number (GL-127). TI-4 --> VI-3	Verify	Back End	Pre-existing data				
CA-37	Vehicle Configuration Number	A number previously assigned to specify a unique test vehicle configuration.			FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(2)	Integer						0	99		Light Duty	FE CAFE		Find 'Vehicle Configuration Number' (TI-5) via Test Number (GL-127). TI-5 --> VI-4	Verify	Back End	Pre-existing data				
CA-38	Analytically-Derived FE/CREE Indicator	The fuel economy values for this vehicle that represent a sub-configuration were generated by an EPA-approved analytically-derived method, in lieu of testing (ref: 40 CFR 600.006(e) and CCD-04-06). The number of ADFE must be no more than 20% of the subconfigurations tested in CAFE (ref: CD-04-06).			FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N=No Y=Yes	Light Duty	FE CAFE			Verify	Back End	Pre-existing data				
CA-39	Data Substitution Indicator	Enter the applicable Data Substitution Indicator for this test.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	DataSubstitutionIndicator	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N = No Y = Yes	Light Duty	FE CAFE			Mfr	Front End	XML				
CA-40	Averaging Method	Enter the Averaging Method to be used if this Test Number is part of an averaging group (i.e. subconfiguration equipped with a multi-mode transmission or Shift Indicator Light), where: N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i))) Note: WT(i) = Averaging Weighting Factor (GL-135) of the MPG value, specified by the manufacturer based on EPA's Guidance (ref: CCD-01-25R, CD-87-01 and A/C 83A); and, FET(i) = MPG of test.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingMethodIdentifier	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	Enumeration								N = No averaging S = Simple averaging (Sum(i=1 to n) (FET(i) * WT(i))) H = Harmonic averaging (1/(Sum(i=1 to n) (FET(i) / WT(i)))	Light Duty	FE CAFE			Mfr	Front End	XML			New LD-FE-CA-BR137	If Model Year >= 2011 then "S" (Simple Averaging) is not allowed.

Pink = TBD	Orange = Changes Due To New Technologies (Multi Fuels, PHEV)	Green = Label/CAFE/GHG Changes	Red = Misc Text Edits	Blue = Misc Certification Changes																						
EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fraction al Digits	Min Value	Max Value	Allowed Values	Industry	Process	Example	IT Notes/Questions	Originator	Collectio n Point	Collection Type	Fro nt- End Vali dati on	Ba ck- En d Vali dati on	Applicable Business Rules	English validation rules
CAFE Information: Uniquely identified by MfrCode + ModelYear + CAFE Compliance Category																										
CA-41	**Averaging Group Indicator**	Enter the Averaging Group Indicator assigned by the manufacturer that will be used to identify all the tests (of the same test procedure) that need to be averaged together.	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingGroupIndicator	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	A(1)	String	1	1	[A-Z0-9]						Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR013	Must not be entered if Averaging Method (CA-40) = 'N'.
CA-42	**Averaging Weighting Factor**	Enter the averaging weighting factor for this vehicle mpg if equipped with either Shift Indicator Light (SIL) or multi-mode transmission. (Formerly 'Test Group Weighting' in CFEIS).	FuelEconomyCAFESubmission/FuelEconomyCAFEDetails/CalculationDetails/BaseLevelDetails/ConfigurationDetails/SubConfigurationDetails/TestVehicleDetails	AveragingWeightingFactorValue	FALSE	1..n (1 for each Test within each Subconfiguration within each Configuration within each Base Level within each Model Type)	N(3,2)	Decimal				3	2	0.01	0.99		Light Duty	FE CAFE				Mfr	Front End	XML			LD-FE-CA-BR014	Must be present if Averaging Method (CA-40) <> 'N'.

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Vehicle Information																							
IV-1	Process Code	Select the desired process code for the current submission.	InUseVerificationProgramSubmission/VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	VehicleProcessCode	TRUE		A(1)	Enumeration								N = New Vehicle Submission C = Correction Vehicle Submission D = Delete Vehicle Submission R = Request Report of Vehicle Submission	Light-Duty	IUVP		Manufacturer	Front End	XML	IV-BR25
IV-2	Manufacturer Code (key field)	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	InUseVerificationProgramSubmission/VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	EPAManufacturerCode	TRUE		A(3)	Fixed String	3	3	[A-Z0-9]{3}	3					Light-Duty	IUVP		Verify	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002 LD-IUVP-IV-BR003a LD-IUVP-IV-BR003b LD-IUVP-IV-BR006 LD-IUVP-IV-BR009 LD-IUVP-IV-BR010
IV-3	Vehicle Identification Number (key field)	Enter the 17-character vehicle identification number (VIN) found under the windshield glass on the driver's side of the dashboard.	InUseVerificationProgramSubmission/VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	VehicleIdentificationNumberText	TRUE		A(17)	String	17	17		17	0				Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002
IV-4	Emission Program (key field)	Select the applicable in-use emission program for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	EmissionProgramIdentifier	TRUE		A(4)	Enumeration								IUVB = Used to meet both EPA and California IUVP requirements IUVE = Used to meet EPA IUVP requirements (mfr) IUVC = Used to meet California IUVP requirements (mfr) IUCB = used to meet both EPA and California IUCP requirements (mfr) IUCE = Used to meet EPA IUCP requirements (mfr) IUCC = Used to meet California IUCP requirements (mfr) R1 = EPA In-Use Surveillance Testing (EPA only) R2 = EPA In-Use Surveillance Testing (EPA only) C1 = California In-Use confirmatory testing Phase 1 (ARB-only) C2 = California In-Use confirmatory testing Phase 2 (ARB-only)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002
IV-5	EPA Investigation Number	A code that may be assigned by EPA to an in-use test program- Does not apply to mfr-IUVP data.	InUseVerificationProgramSubmission/VehicleInformationDetails	EPAInvestigationNumber	FALSE	0..1	A(10)	String		10		10	0				Light-Duty	IUVP		EPA/CARB	**Back-end**	XML	
IV-6	Test Group Name	Enter the Test Group Name for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	TestGroupName	TRUE		A(12)	Fixed string	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4,11}([\\][A-Z0-9]{1,6})?						Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR004 LD-IUVP-IV-BR007 LD-IUVP-IV-BR009
IV-7	Evaporative Family Name	Enter the Evaporative/Refueling Family Name for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	EvaporativeRefuelingFamilyName	FALSE	0..1	A(12)	Fixed String	12	12	[A-HJ-NPR-TV-Y1-9]{1}[A-Z0-9]{4}[0-9]{4}[A-Z0-9]{3}						Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR005 LD-IUVP-IV-BR008 LD-IUVP-IV-BR010
IV-8	Model Year	The model year for this test vehicle configuration.	InUseVerificationProgramSubmission/VehicleInformationDetails	ModelYear	TRUE		N(4)	Year type (1970-2100)						1970	2100		Light-Duty	IUVP		Manufacturer	Front end	XML	LD-IUVP-IV-BR007 LD-IUVP-IV-BR008 LD-IUVP-IV-BR024a LD-IUVP-IV-BR024b
IV-9	Displacement	Enter the applicable engine displacement in liters for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	EngineDisplacementValue	TRUE		N(6,3)	Decimal				5	3	0.001	99.999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-10	Division Code (Make)	Enter the division/make code for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	ManufacturerDivisionCode	TRUE		N(2)	Integer	2	2				0	99		Light-Duty	IUVP	For any back-end reports/views/queries, always display both the division code and the division name.	Manufacturer	Front End	XML	LD-IUVP-IV-BR011
IV-11	Carline Code (Model)	Enter the applicable carline code for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	CarlineCode	TRUE		N(3)	Integer	3	3				0	999		Light-Duty	IUVP	For any back-end reports/views/queries, always display both the carline code and the carline name.	Manufacturer	Front End	XML	LD-IUVP-IV-BR012
IV-12	Verify Division/Make Name	Verify Entry of the Division Name/Make for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	VerifyDivisionMakeName	TRUE		A(20)	String									Light-Duty	IUVP		Verify	Back-end	XML	
IV-13	Verify Carline Name	Verify Entry of the Carline Name for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	VerifyCarlineName	TRUE		A(32)	String									Light-Duty	IUVP		Verify	Back-end	XML	
IV-12a	Division Name (Make)	Enter the Division Name/Make for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	DivisionMakeName	TRUE		A(20)	String									Light-Duty	IUVP		Manufacturer	Front-end	XML	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Vehicle Information																							
IV-13a	Carline Name (Model)	Enter the Carline Name for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	CarlineName	TRUE		A(32)	String									Light-Duty	IUVP		Manufacturer	Front-end	XML	
IV-14	Trim Level	Enter the trim level for this test vehicle (i.e., Super Cab, EXT, etc.)	InUseVerificationProgramSubmission/VehicleInformationDetails	TrimLevelText	FALSE	0..1	A(20)	String									Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-15	Mfr Vehicle Model Name	Enter the optional manufacturer vehicle model name. This is not a required field and may be used at the manufacturer's discretion.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleModelName	FALSE	0..1	A(20)	String									Light Duty	IUVP		Manufacturer	Front end	XML	
IV-16	Vehicle Procured Sales Area	Sales area from where the vehicle is obtained.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleProcuredSalesAreaIdentifier	TRUE		A(2)	Enumeration								CA = California FA = Federal	Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-17	Vehicle Procured State	Select the state from which this test vehicle was procured.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleProcuredStateIdentifier	TRUE		A(2)	Enumeration								Provide a full list of state abbreviations for the United States.	Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-18	Vehicle Procured Altitude	Altitude of area from where the vehicle is obtained.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleProcuredAltitudeIndicator	TRUE		A(1)	Enumeration								L = Low H = High	Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-19	Vehicle Procured Climate	Climate of the area from where the vehicle is obtained	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleProcuredClimateIndicator	TRUE		A(1)	Enumeration								W = Warm area C = Cold area	Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-20	Mileage Category	The mileage category of this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails or InUseVerificationProgramSubmission/VehicleDeleteReportDetails	MileageCategoryIndicator	TRUE		A(1)	Enumeration								H =High mileage (minimum of 50,000 miles) L = Low mileage (minimum of 10,000 miles)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR001a LD-IUVP-IV-BR001b LD-IUVP-IV-BR002 LD-IUVP-IV-BR024a LD-IUVP-IV-BR024b
IV-21	75% Useful Life	Is this vehicle being used to meet the 75% useful life requirement?	InUseVerificationProgramSubmission/VehicleInformationDetails	SeventyFivePercentUsefulLifeIndicator	TRUE		A(1)	Enumeration								Y = Yes, vehicle used to meet 75% of useful life requirement and odometer > 75% of useful life L = Yes, vehicle used to meet 75% of useful life requirement but odometer < 75% (Requires EPA/CARB approval) N = No, vehicle not used to meet 75% of useful life requirement	Light-Duty	IUVP		Manufacturer	Front End	XML	
IV-22	Odometer at time of Procurement	Enter the odometer reading (in miles) at the time of the vehicle procurement	InUseVerificationProgramSubmission/VehicleInformationDetails	OdometerStartValue	TRUE		N(7,1)	Decimal	1	7		7	1				Light Duty	IUVP		Manufacturer	Front End	XML	
IV-23	Transmission Type?	Enter the transmission type for this test vehicle configuration.	InUseVerificationProgramSubmission/VehicleInformationDetails	TransmissionTypeIdentifier	TRUE		A(3)	Enumeration								A = Automatic AM = Automated Manual M = Manual SA = Semi-Automatic CVT= Continuously Variable **SCV=Selectable Continuously Variable (e.g. CVT with paddles)** OT = Other	Light Duty	IUVP	This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR015
IV-24	Transmission Type Other Description?	Enter a description of the transmission type if "Other" is selected.	InUseVerificationProgramSubmission/VehicleInformationDetails	TransmissionTypeOtherText	TRUE		A(30)	String	1	30							Light Duty	IUVP	This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR013a LD-IUVP-IV-BR013b
IV-25	Transmission Lockup?	Is the transmission on this test vehicle configuration equipped with lockup?	InUseVerificationProgramSubmission/VehicleInformationDetails	TransmissionLockupIndicator	TRUE		A(1)	Enumeration								Y=Yes N=No	Light Duty	IUVP	This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR014
IV-26	Creeper Gear?	Is the transmission on this test vehicle configuration equipped with a creeper gear?	InUseVerificationProgramSubmission/VehicleInformationDetails	TransmissionCreeperGearIndicator	TRUE		A(1)	Enumeration								Y=Yes N=No	Light Duty	IUVP	This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	
IV-27	Number of Transmission Gears?	Enter the number of transmission gears on this test vehicle configuration. If this vehicle is equipped with a "transmission type" of "CVT", enter "1" for the number of gears.	InUseVerificationProgramSubmission/VehicleInformationDetails	TransmissionGearCount	TRUE		N(2)	Integer						1	99		Light Duty	IUVP	This field was added to be consistent with transimission info in certification/confirmatory test vehicle information.	Manufacturer	Front end	XML	LD-IUVP-IV-BR016
IV-28	Tire Size	Enter the tire size for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	TireSizeText	FALSE	0..1	A(12)	String									Light Duty	IUVP		Manufacturer	Front end	XML	
IV-29	Axle Ratio	Enter the axle ratio for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	AxleRatioValue	FALSE	0..1	N(3,2)	Decimal				3	2	0.00	9.99		Light Duty	IUVP		Manufacturer	Front end	XML	
IV-30	Engine Code	Enter the engine code for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	EngineCodeText	FALSE	0..1	A(14)	String									Light Duty	IUVP		Manufacturer	Front end	XML	
IV-31	ETW	Equivalent Test Weight in pounds	InUseVerificationProgramSubmission/VehicleInformationDetails	EquivalentTestWeightValue	FALSE	0..1	I(5)	**Enumeration**								**1000, 1125, 1250, 1375, 1500, 1625, 1750, 1875, 2000, 2125, 2250, 2375, 2500, 2625, 2750, 2875, 3000, 3125, 3250, 3375, 3500, 3625, 3750, 3875, 4000, 4250, 4500, 4750, 5000, 5250, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500,10000, 10500, 11000, 11500, 12000, 12500, 13000, 13500, 14000**	Light Duty	IUVP		Manufacturer	Front end	XML	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Vehicle Information																							
IV-32	Date of Inspection	Enter a valid calendar date that the inspection was conducted.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleInspectionDate	FALSE	0..1	D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light Duty	IUVP		Manufacturer	Front end	XML	LD-IUVP-IV-BR017
IV-33	Build Date	Enter the valid calendar date on which this test vehicle was built.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleBuiltDate	TRUE		D(8)	Date			[1-2]{1}[0-9]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light Duty	IUVP		Manufacturer	Front end	XML	LD-IUVP-IT-BR019a LD-IUVP-IT-BR019b
IV-34	Visual MIL Status	Is the MIL dashboard bulb illuminated (during key-on/engine off)?	InUseVerificationProgramSubmission/VehicleInformationDetails	VisualMalfunctionLightIndicator	FALSE		A(1)	Enumeration								Y = MIL Dashboard Bulb Illuminated N = MIL Dashboard Bulb Not Illuminated	Light Duty	IUVP		Manufacturer	Front end	XML	
IV-35	Commanded MIL Status	Is the MIL commanded "On"?	InUseVerificationProgramSubmission/VehicleInformationDetails	CommandedMalfunctionLightIndicator	TRUE		A(1)	Enumeration								Y = MIL commanded on N = MIL commanded off	Light Duty	IUVP		Manufacturer	Front end	XML	
IV-36	Active Trouble Codes Status	Are there any active trouble codes present during the initial inspection?	InUseVerificationProgramSubmission/VehicleInformationDetails	ActiveTroubleCodeIndicator	TRUE			Enumeration								Y = Active Trouble Codes Present N = No Active Trouble Codes Present	Light Duty	IUVP		Manufacturer	Front end	XML	LD-IUVP-IV-BR018
IV-37	Trouble Codes	Enter all applicable 5-digit OBD diagnostic trouble codes. For example, P0### or P1###.	InUseVerificationProgramSubmission/VehicleInformationDetails	ActiveTroubleCode	FALSE	0..10	A(5)	Fixed String	5	5	[A-Z0-9]{5}	5					Light Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR019a LD-IUVP-IV-BR019b
IV-38	Readiness Status Complete?	Are all the readiness monitors complete?	InUseVerificationProgramSubmission/VehicleInformationDetails	ReadinessStatusCompleteIndicator	TRUE		A(1)	Enumeration								Y = all readiness monitors are complete N = not all readiness monitors are complete	Light Duty	IUVP		Manufacturer	Front end	XML	
IV-39	Incomplete Readiness Status Codes	Enter the readiness monitors that are incomplete? Select all that apply.	InUseVerificationProgramSubmission/VehicleInformationDetails	IncompleteReadinessStatusIndicator	FALSE	0..7		Enumeration								CAT = Catalyst O2 = Oxygen Sensor EGR = Exhaust Gas Recirculation EVAP = Evaporative System HO2 = Oxygen Sensor Heater SECA = Secondary Air Ot = Other (must enter a description in the Vehicle Comment field if "Other" selected.	Light Duty	IUVP		Manufacturer	Front end	XML	LD-IUVP-IV-BR020a LD-IUVP-IV-BR020b
IV-40	Vehicle Rejection Code	Enter the applicable rejection code (after the initial inspection) for this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleRejectionCode	TRUE		I(2)	Enumeration	1	2						0 = Vehicle was not rejected 1 = Odometer inoperative, replaced or out of range 2 = Emissions system tampering, leaded fuel operation or aftermarket security system 3 = Severe duty operation (trailer towing [pass. cars], snow plowing, racing) 4 = Extensive collision repair or major engine repair/rebuilding 5 = Ominous noises or serious leaks from engine, transmission and exhaust 6 = Vehicle unsafe for testing 7 = MIL light flashing (severe misfire indication) 8 = Other reason for rejection (requires EPA/CARB approval)	Light Duty	IUVP		Manufacturer	Front End	XML	
IV-41	Vehicle Rejection Comments	If "01" through "08" was selected for the Vehicle Rejection Code, enter an explanation of the reason this test vehicle was rejected.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleRejectionCommentText	FALSE		A(500)	String	1	500							Light Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR022
IV-43	Air Aspiration Method	Enter the applicable air aspiration method for this test vehicle configuration.	InUseVerificationProgramSubmission/VehicleInformationDetails	AirAspirationMethodIdentifier	TRUE		A(2)	Enumeration								NA=Naturally aspirated TC=Turbocharged SC=Supercharged TS=Turbocharged+Supercharged OT=Other	Light-Duty	IUVP		Manufacturer	Front end	XML	
IV-44	Test Drive Code	Enter the applicable test drive code for the way this test vehicle configuration was/is to be tested.	InUseVerificationProgramSubmission/VehicleInformationDetails	TestDriveCode	TRUE		A(1)	Enumeration								1 = Rear Drive Steering Left 2 = Rear Drive Steering Right 3 = Front Drive Steering Left 4 = Front Drive Steering Right 5 = Four Wheel Drive Steering Left 6 = Four Wheel Drive Steering Right 7 = Rear Drive Off Road 9 = Other	Light-Duty	IUVP		Manufacturer	Front end	XML	
IV-42	IUVP Vehicle Comments	Enter any additional comments regarding this test vehicle.	InUseVerificationProgramSubmission/VehicleInformationDetails	VehicleCommentText	FALSE		A(1000)	String	1	1000							Light Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR021
IV-45	Deletion Reason	The reason for deleting the vehicle submission	InUseVerificationProgramSubmission/VehicleDeleteReportDetails	DeletionReportReasonText	FALSE	0..1	A(500)	String	1	500							Light Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IV-BR023

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Test Information																							
IT-1	Process Code	Select the desired process code for the current submission.	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	TestProcessCode	TRUE		A(1)	Enumeration								N = New Test Submission C = Correction Test Submission D = Delete Test Submission R = Request Report of Test Submission	Light-Duty	IUVP	Note to CSC: Use the same list of process codes for all Verify Light-Duty data submissions. Need to discuss the report function for mfrs.	Manufacturer	Front End	XML	
IT-2	Manufacturer Code (key field)	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	EPAManufacturerCode	TRUE		A(3)	Fixed String	3	3	[A-Z0-9]{3}	3					Light-Duty	IUVP		Verify	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR002 LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b LD-IUVP-IT-BR004a LD-IUVP-IT-BR004b LD-IUVP-IT-BR005a LD-IUVP-IT-BR005b LD-IUVP-IT-BR013
IT-3	Vehicle Identification Number (key field)	Enter the 17-character vehicle identification number (VIN) found under the windshield glass on the driver's side of the dashboard.	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	VehicleIdentificationNumberText	TRUE		A(17)	String	17	17		17	0				Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR002 LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b
IT-4	Emission Program (key field)	Select the applicable in-use emission program for this test.	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	EmissionProgramIdentifier	TRUE		A(4)	Enumeration								IUVB = Used to meet both EPA and California IUVP requirements IUVE = Used to meet EPA IUVP requirements (mfr) IUVC = Used to meet California IUVP requirements (mfr) IUCB = used to meet both EPA and California IUCP requirements (mfr) IUCE = Used to meet EPA IUCP requirements (mfr) IUCC = Used to meet California IUCP requirements (mfr) R1 = EPA Recall testing Phase 1 (EPA-only) R2 = EPA Recall testing Phase 2 (EPA-only) C1 = California In-Use confirmatory testing Phase 1 (ARB-only) C2 = California In-Use confirmatory testing Phase 2 (ARB-only)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR002 LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b
IT-5	Verify Test # (key field)	Each separate test for a specific VIN should have a unique test number assigned by Verify.	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	VerifyTestNumber	TRUE		I(7)	Integer									Light-Duty	IUVP	Verify should assign a sequential test number to all light-duty tests submitted to Verify (cert, fuel economy, EPA confirmatory test, IUVP, EPA in-use, etc.)	Verify	Back-end	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR002 LD-IUVP-IT-BR006a LD-IUVP-IT-BR006b LD-IUVP-IT-BR006c
IT-6	Manufacturer/LOD Test #	Enter the applicable manufacturer test number for this test.	InUseVerificationProgramSubmission/TestInformation Details	LODMfrTestNumberText	TRUE		A(20)	String	1	20							Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-7	Test Laboratory Code	Enter the two-digit Verify test laboratory code (assigned in Verify's Mfr Profile Information for your company) where this test was conducted.	InUseVerificationProgramSubmission/TestInformation Details	TestLaboratorySiteCode	TRUE		I(2)	Integer	1	2							Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR007
IT-8	Laboratory Name	The name of the test laboratory where testing was performed	InUseVerificationProgramSubmission/TestInformation Details	TestLaboratoryName	TRUE		A(35)	String									Light-Duty	IUVP	(Note- The test lab name will be pulled from the Manufacturer Info for the specified test lab code. The test lab name must be in the XML file that is sent to CARB.)	Verify	Front End	XML	
IT-9	Odometer at start of test	Enter the odometer reading (in miles) at the beginning of this test.	InUseVerificationProgramSubmission/TestInformation Details	OdometerStartValue	TRUE		N(7,1)	Decimal	1	7		7	1				Light Duty	IUVP		Manufacturer	Front End	XML	
IT-10	Pass/Fail/Void (Federal Standards)	Enter the Federal pass/fail/void status of this test.	InUseVerificationProgramSubmission/TestInformation Details	FederalPassFailIndicator	TRUE			Enumeration								P = Pass F = Fail (describe what Federal standards/emissions it failed in the Test Comments field) V = Void (explain reasons why in the comments field) NA = not applicable (not certified to Federal standards)	Light-Duty	IUVP	We are deleting the option for "A - Incomplete test (describe in the comments field).	Manufacturer	Front End	XML	LD-IUVP-IT-BR008
IT-11	Pass/Fail/Void (California Standards)	ifornia pass/fail/void sta	InUseVerificationProgramSubmission/TestInformation Details	CaliforniaPassFailIndicator	TRUE			Enumeration								P = Pass F = Fail (describe what California standards/emissions it failed in the Test Comments field) V = Void (explain reasons why in the comments field) NA = not applicable (not certified to California standards)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR009

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Test Information																							
IT-12	Test Date	Enter the valid calendar date at the start of this test.	InUseVerificationProgramSubmission/TestInformationDetails	TestDate	TRUE			Date			[1-2]{1}[09]{3}[0-1]{1}[0-9]{1}[0-3]{1}[0-9]{1}						Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR012 LD-IUVP-IT-BR019
IT-13	Test Condition	Select the applicable test condition value for this test.	InUseVerificationProgramSubmission/TestInformationDetails	TestConditionsIdentifier	TRUE			Enumeration								AR = As received AM = After maintenance (Explain what maintenance was performed in the Test Comments field) SS = Set to spec (EPA & ARB only)	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-14	Test Procedure	Select the applicable test procedure for this test.	InUseVerificationProgramSubmission/TestInformationDetails	TestProcedureIdentifier	TRUE			Enumeration								3 = HWFE (HIGHWAY TEST) 10 = IDLE CO 11 = COLD CO 15 = SPITBACK TEST 21 = FED FUEL 2 DAY EXH (BUTANE LOAD) 23 = FED FUEL 2 DAY EVAP (BUTANE) 24 = FED FUEL REFUEL (ORVR) (BUTANE) 25 = CA FUEL 2 DAY EXH (BUTANE LOAD) 27 = CA FUEL 2 DAY EVAP (BUTANE LOAD) 31 = FED FUEL 3 DAY EXH (BUTANE LOAD) 32 - FED FUEL RUNNING LOSS 34 = FED FUEL 3 DAY EVAP(BUTANE LOAD) 35 = CA FUEL 3 DAY EXH (BUTANE LOAD) 37 - CA FUEL RUNNING LOSS 38 = CA FUEL 3 DAY EVAP (BUTANE LOAD) 41 = FED FUEL 2 DAY EXH(HEAT TO LOAD) 43 = FED FUEL 2DAY EVAP(HEAT TO LOAD) 44 = FED REFUEL (ORVR) (HEAT TO LOAD) 45 = CA FUEL 2 DAY EXH (HEAT TO LOAD) 47 = CA FUEL 2 DAY EVAP(HEAT TO LOAD) 51 = CA FUEL 50 DEG(F) EXHAUST TEST 52 = FED FUEL 50 DEG(F) EXHAUST TEST ~~62 = ELECTRIC VEHICLE URBAN RANGE TEST~~ ~~63 = ELECTRIC VEHICLE HIGHWAY RANGE TEST~~ 72 = CST TWO SPEED IDLE TEST 76 = CST PRECD 2 SPD IDLE (EPA ONLY) 81 = Charge Depleting UDDS 83 = Charge Depleting US06 84 = Charge Depleting Highway 85 = Charge Depleting SC03 86 = Charge Depleting 20 Degree F FTP 87 = A/C Idle Test- Manual A/C 88 = A/C Idle Test- Automatic A/C	Light-Duty	IUVP		Manufacturer	Front End	XML	**LD-IUVP-IT-BR020**
IT-15	Fuel Type	Select the applicable fuel type for this test.	InUseVerificationProgramSubmission/TestInformationDetails	TestFuelTypeIdentifier	TRUE			Enumeration								Use the same list of Fuel Types from certification. 1 = INDOLENE 30 6 = EPA Unleaded Gasoline 7 = INDUSTRIAL UNLEADED 100 OCTANE 8 = NUMBER 1 FUEL OIL 9 = DIESEL (AT EPA #2 DIESEL) 10 = NATURAL GAS 19 = DIESEL (8-15 ppm sulfur (ULSD)) (need to add to schema) 22 = SPECIAL UNLEADED 91 RON 23 = CARB Phase II Gasoline 24 = COLD CO REGULAR (CERT) 25 = COLD CO PREMIUM (CERT) 26 = COLD CO REGULAR (Tier 2) 27 = COLD CO PREMIUM (Tier 2) 31 = METHANOL (CERT M10) 32 = METHANOL (CERT M50) 33 = METHANOL (CERT M85) 34 = METHANOL (CERT M100) 36 = E70 (70% ETHANOL 30% EPA UNLEADED GASOLINE) 37 = E10 (10% ETHANOL 90% EPA UNLEADED GASOLINE) 38 = E85 (85% ETHANOL 15% EPA UNLEADED GASOLINE) 41 = CNG 42 = LPG 43 = E10 (10% ETHANOL 90% CAL PHASE II GASOLINE) 44 = E85 (85% ETHANOL 15% CAL PHASE II GASOLINE) 45 = E70 (70% ETHANOL 30% CAL PHASE II GASOLINE) 50 = HYDROGEN 61 = TIER 2 UNLEADED 71 = E100 (100% ETHANOL) 62 = ELECTRICITY	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-16	Shift Indicator Light	Was the Shift Indicator Light used for this test?	InUseVerificationProgramSubmission/TestInformationDetails	ShiftIndicatorLightUsageIndicator	FALSE	0..1		Enumeration								Y = Yes N = No	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-17	Transmission Mode		InUseVerificationProgramSubmission/TestInformationDetails	TransmissionModeIndicator	TRUE			Enumeration								N = Not applicable P = Power E = Economy	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-18	Transmission Configuration As Tested	If the vehicle has a semi-automatic transmission, enter the mode in which it was tested.	InUseVerificationProgramSubmission/TestInformationDetails	TransmissionTestConfigurationIdentifier	FALSE	0..1		Enumeration								A = Automatic mode M = Manual mode	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-19	Test Altitude	Select the applicable altitude value at which this test was conducted.	InUseVerificationProgramSubmission/TestInformationDetails	TestAltitudeIndicator	TRUE			Enumeration								L = Low Altitude H = High Altitude	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-20	Dyno Type	Select the applicable value for the type of dynamometer used for this test.	InUseVerificationProgramSubmission/TestInformationDetails	DynamometerTypeIdentifier	FALSE	0..1		Enumeration								HY = Hydrokinetic (8.65 inch twin rolls) E1 = Electric (8.65 inch twin rolls) E2 = Electric (20 inch twin rolls) E3 = Electric (48 inch single roll) E4 = Electric (24 inch single roll) 4A = 4WD Electric (48 inch single roll) 4B = 4WD Electric (24 inch single roll) 4C = 4WD Electric (20 inch twin rolls)	Light-Duty	IUVP		Manufacturer	Front End	XML	

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Test Information																							
IT-21	Road Load HP	Enter the road-load horsepower (HP) for this test. This may also be referred to as dyno horsepower.	InUseVerificationProgramSubmission/TestInformation Details	RoadLoadHorsepowerValue	FALSE	0..1	N(3,1)	Floating Decimal Number	3	3		3	1	0	99.9		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-22	Dynamometer Set Coefficient A	Enter the single roll dynamometer set coefficient A for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	SetCoefficientAValue	FALSE	0..1	R(7)	Floating Decimal Number				6	3	-1000	999.999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-23	Dynamometer Set Coefficient B	Enter the single roll dynamometer set coefficient B for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	SetCoefficientBValue	FALSE	0..1	R(7)	Floating Decimal Number				6	5	-10	9.99999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-24	Dynamometer Set Coefficient C	Enter the single roll dynamometer set coefficient C for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	SetCoefficientCValue	FALSE	0..1	R(7)	Floating Decimal Number				7	6	-10	9.999999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-25	Dynamometer Target Coefficient A	Enter the single roll dynamometer target coefficient A for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	TargetCoefficientAValue	FALSE	0..1	R(7)	Floating Decimal Number				6	3	-1000	999.999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-26	Dynamometer Target Coefficient B	Enter the single roll dynamometer target coefficient B for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	TargetCoefficientBValue	FALSE	0..1	R(7)	Floating Decimal Number				6	5	-10	9.99999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-27	Dynamometer Target Coefficient C	Enter the single roll dynamometer target coefficient C for this test.	InUseVerificationProgramSubmission/TestInformation Details/DynamometerSetTarget Details	TargetCoefficientCValue	FALSE	0..1	R(7)	Floating Decimal Number				7	6	-10	9.999999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-38	Mileage Category	The mileage category of this test vehicle.	InUseVerificationProgramSubmission/TestInformation Details or InUseVerificationProgramSubmission/TestDeleteReportDetails	MileageCategoryIndicator	TRUE		A(1)	Enumeration								H = High mileage (minimum of 50,000 miles) L = Low mileage (minimum of 10,000 miles)	Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR001a LD-IUVP-IT-BR001b LD-IUVP-IT-BR002 LD-IUVP-IT-BR003a LD-IUVP-IT-BR003b LD-IUVP-IT-BR018
IT-39	Deletion Reason	The reason for deleting the test submission	InUseVerificationProgramSubmission/TestDeleteReportDetails	DeletionReportReasonText	FALSE	0..1	A(500)	String	1	500							Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR015

EPA Data Element Number	Long Name	Description	Parent's Name	XML Tag	Required	Multiplicity	Basic Data Type	Data Type Description	Min Length	Max Length	Pattern	Total Digits	Fractional Digits	Min Value	Max Value	Allowed Values	Industry	Process	Notes/Questions	Originator	Collection Point	Collection Type	Applicable Business Rules
IUVP Test Information																							
IT-28	Test Result/Emission Name	Select the desired test result name.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	TestResultIdentifier	TRUE	0..n		Enumeration								HC-TOTAL (Total Hydrocarbon) CO (Carbon Monoxide) CO2 (Carbon Dioxide) CREE (Carbon-Related Exhaust Emissions) OPT-CREE (Optional Carbon-Related Exhaust Emissions) NOX (Nitrogen Oxides) PM (Particulate Matter) PM-COMP (SFTP Composite Particulate Matter) HC-NM (Non-methane Hydrocarbon) OMHCE (Organic material Hydrocarbon equivalent) OMNMHCE (Organic material non-methane Hydrocarbon equivalent) NMOG (Non-methane organic gases (California)) HCHO (Formaldehyde) H3C2HO (Acetaldehyde) HC-NM+NOX (SFTP Non-methane Hydrocarbon+Nitrogen Oxides for US06 or SC03) HC-NM+NOX-COMP (SFTP Composite Non-methane Hydrocarbon+Nitrogen Oxides) CO-COMP (SFTP Composite Carbon Monoxide) ETHANOL (C2H5OH- Ethanol) FE BAG 1 (Bag 1 Fuel Economy) FE BAG 2 (Bag 2 Fuel Economy) FE BAG 3 (Bag 3 Fuel Economy) FE BAG 4 (Bag 4 Fuel Economy) MFR FE (Manufacturer Fuel Economy) HC (Hydrocarbon for Running Loss and ORVR) METHANE (CH4) (Methane) METHANOL (CH3OH) (Methanol) N2O (Nitrous Oxide) SPITBACK (Spitback Hydrocarbon in grams) Allowed For Charge Depleting Test Procedures Only: AMP-HRS- integrated Amp-hours START-SOC- System Start State of Charge Watt-hours END-SOC- System End State of Charge Watt-hours ACT-DISTANCE- Actual Distance Driven (miles) AS-VOLT - Average System Voltage	Light-Duty	IUVP		Manufacturer	Front End	XML	Update LD-IUVP-IT-BR021 Update LD-IUVP-IT-BR022 Update LD-IUVP-IT-BR023
IT-29	Weighted result	Test results. Weighted result if more than 1 bag is measured.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	WeightedResultValue	TRUE	0..n	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-30	Test Result Unit	Select the applicable units for this test result.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	TestResultUnitIdentifier	TRUE	0..n		Enumeration								g/m = grams per mile g/t = grams per test (applies to evaporative tests) mpg = miles per gallon g/g = grams per gallon (dispensed) for ORVR tests	Light-Duty	IUVP		Manufacturer	Front End	XML	
IT-31	In-use Standard (Federal)	The Federal in-use emission standard for the selected emission name.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	FederalInUseStandardValue	FALSE	0..n	N(7,4)	Decimal			[0-9]{1,3}([\\.][0-9]{1,4})?	7	4	0	999.9999		Light-Duty	IUVP		Manufacturer	Back-end	XML	
IT-32	In-use Standard (California)	Emission standard for the emission listed.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	CaliforniaInUseStandardValue	FALSE	0..n	N(7,4)	Decimal			[0-9]{1,3}([\\.][0-9]{1,4})?	7	4	0	999.9999		Light-Duty	IUVP		Manufacturer	Back-end	XML	
IT-33	bag 1 result	Bag 1 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	Bag1ResultValue	FALSE	0..n	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
IT-34	bag 2 result	Bag 2 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	Bag2ResultValue	FALSE	0..n	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
IT-35	bag 3 result	Bag 3 result of the emission listed in grams/mile. Required for FTP tests.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	Bag3ResultValue	FALSE	0..n	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR016
IT-36	bag 4 result	Bag 4 result of the emission listed in grams/mile. Only required for FTP tests of hybrid vehicles.	InUseVerificationProgramSubmission/TestInformationDetails/TestResultDetails	Bag4ResultValue	FALSE	0..n	N(11,7)	Decimal				11	7	0	9999.9999999		Light-Duty	IUVP		Manufacturer	Front End	XML	LD-IUVP-IT-BR017
IT-37	IUVP Test Comments	Enter any additional comments for this test. Include any emission standards and emission names that failed. If this test was voided, describe the reason for the void.	InUseVerificationProgramSubmission/TestInformationDetails	TestCommentText	FALSE	0..1	A(1000)	String	1	1000							Light-Duty	IUVP		Manufacturer	Front End		LD-IUVP-IT-BR010 LD-IUVP-IT-BR011 LD-IUVP-IT-BR014

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality
Date 2011-May-13

These equations are used by Verify to calculate CREE and Optional CREE if they are selected as Test Result/Emission Name in Test Information.

Gasoline - 40 CFR 600.113-12(h)(2)

CREE 40 CFR 600.113-12(h)(2)(i) = [(CWF / 0.273) * **HC**] + (1.571 * CO) + CO2
OptCREE 40 CFR 600.113-12(h)(2)(ii) = [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Diesel - 40 CFR 600.113-12(i)(2)

CREE 40 CFR 600.113-12(i)(2)(i) = (3.172 * **HC**) + (1.571 * CO) + CO2
OptCREE 40 CFR 600.113-12(i)(2)(ii) = (3.172 * **NMHC**) + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Methanol - 40 CFR 600.113-12(j)(2)

CREE 40 CFR 600.113-12(j)(2)(i) = [(CWF / 0.273) * **HC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + CO2
OptCREE 40 CFR 600.113-12(j)(2)(ii) = [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + CO2 **+ (298 * N2O) + (25 * CH4)**

CNG - 40 CFR 600.113-12(k)(2)

CREE 40 CFR 600.113-12(k)(2)(i) = [(CWFNMHC / 0.273) * NMHC] + (1.571 * CO) + CO2 **+ (2.743 * CH4)**
OptCREE 40 CFR 600.113-12(k)(2)(ii) = [(CWFNMHC / 0.273) * NMHC] + (1.571 * CO) + CO2 **+ (298 * N2O) + (25 * CH4)**

Ethanol - 40 CFR 600.113-12(l)(2)

CREE 40 CFR 600.113-12(l)(2)(i) = [(CWF / 0.273) * **HC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + (1.911 * C2H5OH) + (1.998 * C2H4O) + CO2
OptCREE 40 CFR 600.113-12(l)(2)(ii) = [(CWF / 0.273) * **NMHC**] + (1.571 * CO) + (1.374 * CH3OH) + (1.466 * HCHO) + (1.911 * C2H5OH) + (1.998 * C2H4O) + CO2 **+ (298 * N2O) + (25 * CH4)**

Notes:
For HC, use the Verify name of HC-TOTAL
Methane = CH4
Methanol = CH3OH
Ethanol = C2H5OH
Formaldehyde = HCHO
Acetaldehyde = H3C2HO or C2H4O

Items in bold above are the items that are different between the CREE and Opt-CREE equations for each fuel type.

For each emission name, use the rounded test result (CO2 rounded to whole number) with the 120k DF applied if applicable (if aged components there may not be DFs). The final CREE/Opt-CREE is then rounded to a whole number.

Target Fuel Economy and Target CO2 for a footprint are based on the following equations:

49 CFR 531.5 & 533.5, CAFE Standards

$$\text{Reformed Target FE (Truck 2008-2011) (Car 2011 only)} = \frac{1}{\frac{1}{A} + \left(\frac{1}{B} - \frac{1}{A}\right)\frac{e^{(\text{Footprint} - C)/D}}{1 + e^{(\text{Footprint} - C)/D}}}$$

Per regulation: e = 2.718

49 CFR 531.5 & 533.5, CAFE Standards

$$\text{Reformed Target FE (2012 +)} = \frac{1}{\text{Min}\left(\text{Max}\left(C \times \text{Footprint} + D, \frac{1}{A}\right), \frac{1}{B}\right)}$$

86 CFR 1818-12, GHG Standards

$$\text{Target } CO_2 \text{ (2012 +)} = A \times \text{Footprint} + B$$

If Footprint <= 41 SqFt, Target CO_2 = C
If Footprint > 56 SqFt, Target CO_2 = D

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality
Date 2011-May-13

Date of Change	Description	Data Element	Version #	Enhancement to Baseline (Y/N)	Comments
CAFÉ					**Items in yellow may require analysis to confirm baseline enhancements that may affect project cost and/or timeline**
11/23/2010	Added "/GHG" to multiplicity column	CA-3		N	
11/23/2010	Added "/GHG" to multiplicity column	CA-0		N	
11/23/2010	Added "/GHG" to multiplicity column	CA-1		N	
11/23/2010	Changed DE name from "CAFE Compliance Category to "CAFE/GHG Compliance Category"; added "/GHG" to description, multiplicity; removed "DP = Domestic Passenger Vehicles IP = Import Passenger Vehicles" from allowed values and added "PV = Passenger Vehicles";	CA-4		N	
11/23/2010	New DE "GHG Exempt Indicator"	CA-127			
11/23/2010	New DE " GHG Calculation Method"	CA-128			
11/23/2010	New DE "For OCREE calculations, should N2O emissions always default to .010gpm?"	CA-129			
11/23/2010	Added "/GHG" to element name, description, multiplicity	CA-4.5		N	
11/23/2010	New DE "EPA Calculated Official Model Year GHG Production Units"	CA-130			
11/23/2010	New DE "EPA Calculated Official Model Year GHG TLAAS Production Units"	CA-131			
11/23/2010	Changed DE name from "EPA Official Model Year Truck CAFE Production Units" to "EPA Calculated Official Model Year Truck CAFE Production Units" ; Added new BR "Required if CAFE/GHG Compliance Category = Light Truck"	CA-53		N	
11/23/2010	Changed DE name from "EPA Official Model Year Domestic Passenger Vehicle CAFE Production Units" to "EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units" ; Added BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-54		N	
11/23/2010	Changed DE name from "EPA Official Model Year Import Passenger Vehicle CAFE Production Units" to "EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units"; Added new BR: Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-55		N	
11/23/2010	New DE "Manufacturer Calculated Official Model Year GHG Production Units"	CA-132			
11/23/2010	New DE "Manufacturer Calculated Official Model Year GHG TLAAS Production Units"	CA-133			

11/23/2010	Changed DE name from "Manufacturer Official Model Year Truck CAFE Production Units" to "Manufacturer Calculated Official Model Year Truck CAFE Production Units"; Added: Parent's name, XML Tag, new BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-50		N	
11/23/2010	Changed DE Name from"Manufacturer Official Model Year Domestic Passenger Vehicle CAFE Production Units" to "Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units"; Added Parent's name, XML Tag, new BR: Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-51		N	
11/23/2010	Changed DE Name from "Manufacturer Official Model Year Import Passenger Vehicle CAFE Production Units" to "Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units"; Added Parent's name, XML Tag, new BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-52		N	
11/23/2010	New DE "EPA Calculated Baseline Average GHG Unrounded 4 Decimal"	CA-134			
11/23/2010	New DE " EPA Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal"	CA-135			
11/23/2010	Changed DE name from "EPA Baseline Truck CAFE Unrounded 4 Decimal" to "EPA Calculated Baseline Truck CAFE Unrounded 4 Decimal"; Changed min. value from 1 to 0, new BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-59		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added new BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-60		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal; new BR added: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-61		N	
11/23/2010	New DE "EPA Calculated Baseline Average GHG Rounded Whole Number"	CA-136			
11/23/2010	New DE "EPA Calculated Baseline Average GHG TLAAS Rounded Whole Number"	CA-137			

11/23/2010	Changed DE name from "EPA Baseline Truck CAFE Rounded 1 Decimal" to "EPA Calculated Baseline Truck CAFE Rounded 1 Decimal"; Changed Basic Data Type from "N(4,1) to N(5,1)"; Changed Min Value from 1 to 0; Added "Light Duty" to Industry; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-63		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-66		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-67		N	
11/23/2010	Changed DE name from "EPA Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-70		N	
11/23/2010	Changed DE name from "EPA Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-71		N	
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal"	CA-138			
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal"	CA-139			
11/23/2010	Changed DE name from "Manufacturer Baseline Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal"; Added Parent's Name, XML Tag; Changed min. value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-56		N	

11/23/2010	Changed DE name from"Manufacturer Baseline Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-57		N	
11/23/2010	Changed DE name form "Manufacturer Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-58		N	
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG Rounded Whole Number"	CA-140			
11/23/2010	New DE "Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number"	CA-141			
11/23/2010	Changed DE name from "Manufacturer Baseline Truck CAFE Rounded 1 Decimal" to "Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal"; Added Parent's Name, XML Tag; Changed min. value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-62		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-64		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal";	CA-65		N	
11/23/2010	Changed DE name from "Manufacturer Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-68		N	

11/23/2010	Changed DE name from "Manufacturer Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-69		N	
11/23/2010	New DE "EPA Calculated Final Average GHG Unrounded 4 Decimal"	CA-142			
11/23/2010	New DE "EPA Calculated Final Average GHG TLAAS Unrounded 4 Decimal"	CA-143			
11/23/2010	Changed DE name from "EPA Final Truck CAFE Unrounded 4 Decimal" to "EPA Calculated Final Truck CAFE Unrounded 4 Decimal"; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-75		N	
11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-76		N	
11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-77		N	
11/23/2010	New DE "EPA Calculated Final Average GHG Rounded Whole Number"	CA-144			
11/23/2010	New DE "EPA Calculated Final Average GHG TLAAS Rounded Whole Number"	CA-145			
11/23/2010	Changed DE name from "EPA Final Truck CAFE Rounded 1 Decimal" to "EPA Calculated Final Truck CAFE Rounded 1 Decimal"; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-79		N	
11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Unrounded Test Prodedure Adjusted 4 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Test Prodedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-82		N	
11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal" to " EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-83		N	

11/23/2010	Changed DE name from "EPA Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-86		N	
11/23/2010	Changed DE name from "EPA Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "EPA Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-87		N	
11/23/2010	New DE "Manufacturer Calculated Final Average GHG Unrounded 4 Decimal"	CA-146			
11/23/2010	New DE "Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal"	CA-147			
11/23/2010	Changed DE name from "Manufacturer Final Truck CAFE Unrounded 4 Decimal" to "Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal"; Added Parent's Name, XML Tag; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-72		N	
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-73		N	
11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-74		N	
11/23/2010	New DE "Manufacturer Calculated Final Average GHG Rounded Whole Number"	CA-148			
11/23/2010	New DE "Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number"	CA-149			
11/23/2010	New DE "Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal";	CA-150			this DE replaced CA-78 from the previous spreadsheet
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-80		N	

11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-81		N	
11/23/2010	Changed DE name from "Manufacturer Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-84		N	
11/23/2010	Changed DE name from "Manufacturer Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal" to "Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-85		N	
11/23/2010	New DE "EPA Official Average GHG Grams Per Mile"	CA-151			
11/23/2010	New DE "EPA Official Average GHG TLAAS Grams Per Mile"	CA-152			
11/23/2010	Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-91		N	
11/23/2010	New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-92		N	
11/23/2010	New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-93		N	
11/23/2010	New DE "Manufacturer Calculated Official Average GHG Grams Per Mile"	CA-153			
11/23/2010	New DE "Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile"	CA-154			
11/23/2010	Changed DE name from "Manufacturer Official Truck CAFE Miles Per Gallon" to "Manufacturer Calculated Official Truck CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; Changed Min Value from 1 to 0; New BR: "Required if CAFE/GHG Compliance Category = Light Truck"	CA-88		N	
11/23/2010	Changed DE name from "Manufacturer Official Domestic Passenger Vehicle CAFE Miles Per Gallon" to "Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-89		N	

11/23/2010	Changed DE name from "Manufacturer Official Import Passenger Vehicle CAFE Miles Per Gallon" to "Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon"; Added Parent's Name, XML Tag; New BR: "Required if CAFE/GHG Compliance Category = Passenger Vehicle"	CA-90		N	
11/23/2010	Noted that Parent's name and XML tag are missing	CA-11		N	
11/23/2010	Basic data type changed to "A(12)"; change to fixed string; Min/Max lengths changed to 12 and 12; Min value changed to 4, Max value deleted;	CA-14.1		N	
11/23/2010	New DE "CAFE Domestic/Import Indicator"	CA-155			
11/23/2010	New DE "GHG TLAAS Indicator"	CA-156			
11/23/2010	New DE "GHG Advanced Technology Indicator"	CA-157			
11/23/2010	New DE "Footprint Final Model Year GHG Production Units"	CA-158			
11/23/2010	New DE "EPA Calculated Footprint Target GHG Value (grams per mile)"	CA-159			
11/23/2010	Deleted entire DE	CA-21			
11/23/2010	Changed DE name from "EPA Footprint Target FE Value (miles per gallon)" to "EPA Calculated Footprint Target FE Value (miles per gallon)";	CA-21.5		N	
11/23/2010	Deleted entire DE	CA-21.7			
11/23/2010	New DE "Manufacturer Calculated Unrounded GHG Standard"	CA-160			
11/23/2010	New DE "EPA Calculated Unrounded GHG Standard"	CA-161			
11/23/2010	New DE "EPA Calculated Unrounded GHG Standard Discrepancy Value"	CA-162			
11/23/2010	New DE "EPA Calculated Final GHG Standard"	CA-163			
11/23/2010	New DE "Manufacturer GHG Comments"	CA-164			
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22		N	
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22.3		N	
11/23/2010	Changed Min. Value from "0.0001" to "0.0000"	CA-22.7		N	
11/23/2010	Added Parent's name, XML tag	CA-25.1		N	
11/23/2010	New DE "EPA Calculated Baseline Model Type City GHG Value 1 decimal"	CA-165			
11/23/2010	New DE "EPA Calculated Baseline Model Type Highway GHG Value 1 decimal"	CA-166			
11/23/2010	New DE "EPA Calculated Baseline Model Type Combined GHG Value 1 decimal"	CA-167			
11/23/2010	New DE "EPA Calculated Baseline Model Type Combined GHG Value Whole Number"	CA-168			
11/23/2010	New DE "EPA Calculated Final Model Type City GHG Value 1 decimal"	CA-169			
11/23/2010	New DE "EPA Calculated Final Model Type Highway GHG Value 1 decimal"	CA-170			
11/23/2010	New DE "EPA Calculated Final Model Type Combined GHG Value 1 decimal"	CA-171			

11/23/2010	New DE "EPA Calculated Final Model Type Combined GHG Value Whole Number"	CA-172			
11/23/2010	New DE "EPA Calculated Model Type GHG Production Units"	CA-173			
11/23/2010	New DE "EPA Calculated Baseline Base Level City GHG Value 1 decimal"	CA-174			
11/23/2010	New DE "EPA Calculated Baseline Base Level Highway GHG Value 1 decimal"	CA-175			
11/23/2010	New DE "EPA Calculated Baseline Base Level Combined GHG Value 1 decimal"	CA-176			
11/23/2010	New DE "EPA Calculated Final Base Level City GHG Value 1 decimal"	CA-177			
11/23/2010	New DE "EPA Calculated Final Base Level Highway GHG Value 1 decimal"	CA-178			
11/23/2010	New DE "EPA Calculated Final Base Level Combined GHG Value 1 decimal"	CA-179			
11/23/2010	New DE "EPA Calculated Base Level GHG Production Units"	CA-180			
11/23/2010	New DE "EPA Calculated Baseline Configuration City GHG Value 1 decimal"	CA-181			
11/23/2010	New DE "EPA Calculated Baseline Configuration Highway GHG Value 1 decimal"	CA-182			
11/23/2010	New DE "EPA Calculated Baseline Configuration Combined GHG Value 1 decimal"	CA-183			
11/23/2010	New DE "EPA Calculated Final Configuration City GHG Value 1 decimal"	CA-184			
11/23/2010	New DE "EPA Calculated Final Configuration Highway GHG Value 1 decimal"	CA-185			
11/23/2010	New DE "EPA Calculated Final Configuration Combined GHG Value 1 decimal"	CA-186			
11/23/2010	New DE "EPA Calculated Configuration GHG Production Units"	CA-187			
11/23/2010	Added DE name (missing from previous DR spreadsheet) "EPA Calculated Baseline Configuration City FE Value 4 decimal"	CA-110		N	
11/23/2010	Deleted Min. and Max values; edited enumeration values;	CA-31		N	
11/23/2010	New DE "EPA Calculated Baseline Subconfiguration City GHG Value 1 decimal"	CA-188			
11/23/2010	New DE "EPA Calculated Baseline Subconfiguration Highway GHG Value 1 decimal"	CA-189			
11/23/2010	New DE "EPA Calculated Final Subconfiguration City GHG Value 1 decimal"	CA-190			
11/23/2010	New DE "EPA Calculated Final Subconfiguration Highway GHG Value 1 decimal"	CA-191			
11/23/2010	New DE "EPA Calculated Subconfiguration GHG Production Units"	CA-192			
11/23/2010	Deleted entire DE	CA-119			
11/23/2010	Deleted entire DE	CA-122			
11/23/2010	Added Parent's name, XML tag	CA-124		N	
11/23/2010	Added Parent's name, XML tag	CA-125		N	
11/23/2010	Added Parent's name, XML tag	CA-126		N	
11/23/2010	Added Parent's name, XML tag	CA-34		N	
11/23/2010	New DE "Manufacturer Subconfiguration Final Model Year GHG Production Units"	CA-193			

11/23/2010	Added Parent's name, XML tag	CA-32		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
FE Label					
11/23/2010	Added Parent's name, XML tag	GL-78.2		N	
11/23/2010	Added Parent's name, XML tag	GL-79.1		N	
11/23/2010	Added Parent's name, XML tag	GL-79.2		N	
11/23/2010	Added Parent's name, XML tag; Added new allowed value "CS-3C = Charge Sustaining 3-cycle"	GL-79.3		N	
11/23/2010	Edited allowed values field	GL-123		N	
11/23/2010	Added "GL-130.5 continued" DE; Updated Validation rules	GL-130.5		N	
11/23/2010	Added Parent's name, XML tag	GL-173.1		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/24/2011	Added NEW GL-130.2	GL-130.2		N	
4/13/2011	Updated multiplicity	GL-81			
4/13/2011	Changed Collection Type	GL-130			
4/13/2011	Changed Collection Type	GL-130.5			
4/15/2011	Updated enumeration list from KW-HR100 to KW-HR/100	GL-90			
4/28/2011	Updated the multiplicity	GL-81			
4/28/2011	Add 'HYD' as a new enumeration	GL-13.5.3			
4/28/2011	Hide the business rule text column	All DE's			
4/28/2011	Marked as Deleted	GL-7			
4/28/2011	Marked as Deleted	GL-8			
4/28/2011	Marked as Deleted	GL-9			
Road Load					
11/23/2010	Added Parent's name	RL-1		N	
11/23/2010	Added Parent's name, XML tag	RL-1.5		N	
11/23/2010	Added Parent's name, XML tag	RL-1.6		N	
11/23/2010	Added Parent's name, XML tag	RL-2		N	
11/23/2010	Added Parent's name	RL-3		N	
11/23/2010	Added Parent's name	RL-4		N	
11/23/2010	Added Parent's name	RL-5		N	
11/23/2010	Added Parent's name, XML tag	RL-5.1		N	
11/23/2010	Added Parent's name, XML tag	RL-6		N	
11/23/2010	Added Parent's name; Changed max value from 100 to 99.999	RL-7		N	
11/23/2010	Changed collection type from "assigned" to "Pre-existing"	RL-14		N	
11/23/2010	Added Parent's name	RL-15		N	
11/23/2010	Added Parent's name	RL-16		N	
11/23/2010	Added Parent's name, XML tag	RL-17		N	
11/23/2010	Added Parent's name, XML tag	RL-18		N	
11/23/2010	Added Parent's name	RL-19		N	
11/23/2010	Added Parent's name	RL-20		N	
11/23/2010	Added Parent's name	RL-21		N	
11/23/2010	Added Parent's name	RL-22		N	
11/23/2010	Added Parent's name	RL-24		N	
11/23/2010	Added Parent's name	RL-25		N	
11/23/2010	Added Parent's name	RL-26		N	
11/23/2010	Added Parent's name, XML tag	RL-27		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				

4/28/2011	Hide the business rule text column	All DE's			
Vehicle Information					
12/21/2010	Changed Min Value from 0.1 to 0.0	VI-43.5		N	
12/22/2010	Updated the first Validation Rule with new text	VI-11.6		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Updated description to remove the selection of invalid value of 'NA'	VI-15			
4/18/2011	Fixed enum values (S/T)	VI-11.2 VI-11.3			
4/28/2011	Added new enumeration: 'HYD'	VI-11.1			
4/28/2011	Hide the business rule text column	All DE's			
Test Information					
12/21/2010	Modified Notes/Questions to add mapping for Test Procedures Codes 84, 85, 86 Replaced the validations rules with the new rule	TI-43		N	
12/21/2010	Added new note re: Test Procedure Codes 80, 82	TI-8		N	
12/21/2010	Updated the first Validation Rule with new text	TI-40		N	
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new enumeration value "AS-VOLT"	TI-19		N	
2/10/2011	Changed DE number due to duplication	TI-18.5		N	This DE number was duplicated so EPA requested the new DE "Charge Depleting Range (Calculated miles)" be changed to TI-18.6.1
2/21/2011	Added new DE for Opt-CREE	TI-19.5.1			Created separate DE's for CREE and Opt-CREE Updated BR - need to confirm text is correct
2/21/2011	Updated existing DE	TI-19.5			Removed Opt-CREE portion
2/24/2011	Updated BR text as it is in VERIFY-3326	TI-19			
2/24/2011	Changed the DE number from TI-19.5.1 to TI-19.6 as it is listed in schema; Added XML tag and Parent Name	TI-19.6		Y	
2/24/2011	Updated Parent Name	TI-20.6			
3/30/2011	Added the Data Type Description as 'Enumeration'	TI-20.5			
4/13/2011	Added new BR for TI-19	TI-19			
4/13/2011	Added new enumeration value "NOT5C"	TI-45			
4/15/2011	Updated enumeration list from KW-HR100 to KW-HR/100	TI-20.5			
4/28/2011	Hide the business rule text column	All DE's			
Test Group					
12/21/2010	Updated Collection Type column as 'Pre-existing Data'	TG-203		N	
12/21/2010	Updated Multiplicity column	TG-7.4		N	
12/21/2010	Updated Multiplicity column	TG-7.4.1		N	
12/21/2010	Updated Multiplicity column	TG-7.5		N	
12/21/2010	Updated Multiplicity column	TG-218		N	
12/21/2010	Updated Multiplicity column	TG-219		N	
12/21/2010	Updated Multiplicity column	TG-219.1		N	
12/21/2010	Updated Multiplicity column	TG-219.2		N	
12/21/2010	Updated Multiplicity column	TG-8.4		N	
12/21/2010	Updated Multiplicity column	TG-8.5		N	
12/21/2010	Updated Multiplicity column	TG-8.6		N	

12/21/2010	Updated Multiplicity column	TG-219.3.1		N	
12/21/2010	Updated Multiplicity column	TG-219.4.1		N	
12/21/2010	Updated Multiplicity column	TG-219.4.2		N	
1/27/2011	Updated validation rule	TG-7.7		N	New Text: If Drive Source (TG-7.1) equals 'C' (Combustion Engine) and if more than one Fuel(s) (TG-7.3) selected is combustible (i.e., "Gasoline" (G), "Diesel" (D), "Methanol" (M), "Ethanol" (E), "Compressed Natural Gas" (CNG), "Liquified Natural Gas" (LNG), or "Liquified Petroleum Gas" (LPG)), and optional for "Hydrogen" (H), then Multiple Fuel Combustion - Separate or Together (TG-7.7) is required. Otherwise, it is not allowed.
1/27/2011	Updated validation rule	TG-7.5		N	New Text: If more than one Fuel(s) (TG-7.3) is selected for the Test Group when Drive Source (TG-7.1) is 'C' (Combustion Engine), and if model year is greater than or equal to 2012, then CREE Weighting Factor for Dual/Multiple Fuel Vehicles (TG-7.5) is required for each fuel. Otherwise, it is not allowed.
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new data element	TG-217.1			
2/9/2011	Added new enumeration value "AS-VOLT"	TG-225			
2/21/2011	Created new DE for Opt-CREE	TG-8.4.1			
2/21/2011	Updated DE	TG-8.4			Removed Opt-CREE
2/23/2011	Created new DE for Opt-CREE	TG-8.5.1			
2/23/2011	Updated DE	TG-8.5			Removed Opt-CREE
2/23/2011	Created new DE for Opt-CREE	TG-8.6.1			
2/23/2011	Updated DE	TG-8.6			Removed Opt-CREE
2/24/2011	Updated Required Field to FALSE	TG-216.7			
2/24/2011	Updated Required Field to FALSE	TG-32.5			
2/24/2011	Updated Required Field to FALSE	TG-32.6			
2/24/2011	Updated XML Tag	TG-8.4			
2/24/2011	Added new XML Tag and Parent Name	TG-8.4.1			
2/24/2011	Updated XML Tag and Parent Name	TG-8.5			
2/24/2011	Updated XML Tag and Parent Name	TG-8.6			
2/24/2011	Added new XML Tag and Parent Name	TG-8.5.1			
2/24/2011	Added new XML Tag and Parent Name	TG-8.6.1			
2/28/2011	Updated the Enumeration List, Applicable Business Rules, and English Validation Rules column	TG-209			
2/28/2011	Updated the Enumeration List, Applicable Business Rules, and English Validation Rules column	TG-225			
3/3/2011	Added new business rules created based on the Group business rules	Many DE's			
3/30/2011	Corrected the XML tag	TG-7.9			
3/30/2011	Added the Allowed Values (same as TG-204)	TG-217.1			

3/30/2011	Corrected the Allowed Value to remove 'COLD' as a valid option	TG-203			
4/7/2011	Changed basic data type from A(3) to A(1) as dicussed in VERIFY-7209	TG-7.4.1			
4/15/2011	Updated Applicable BRs	All DE's			
4/18/2011	Fixed enum values (S/T)	TG-7.6 TG 7.7			
4/28/2011	Added new enumeration: 'HYD'	TG-7.3			
4/28/2011	Hide the business rule text column	All DE's			
Footprint					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
Decision Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Corrected the XML tag	DI-25.1			
4/28/2011	Hide the business rule text column	All DE's			
Shift Schedule					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
Supplemental Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new enumeration value "AS-VOLT"	SI-59			
2/28/2011	Updated English Validation Rule based on JIRA	SI-59			
4/28/2011	Hide the business rule text column	All DE's			
Carline					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
Evaporative Family					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
3/30/2011	Corrected the XML tag	EV-3			
4/18/2011	Fixed enum values (S/T)	EV-3.6			
4/28/2011	Added new enumeration: 'HYD'	EV-3.5			
4/28/2011	Hide the business rule text column	All DE's			
Certificate Request					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			
IUVP Test Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
2/9/2011	Added new enumeration value "AS-VOLT"	IT-28			
4/28/2011	Hide the business rule text column	All DE's			
IUVP Vehicle Information					
2/9/2011	Updated all BR numbers with applicable JIRA numbers				
4/28/2011	Hide the business rule text column	All DE's			

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality
Date 2011-May-13

Summary of Changes Made to GHG Data Requirements since 09/09/2010

Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-127	GHG Exempt Indicator	New Data Element
11/23/2010	CAFÉ	CA-128	GHG Calculation Method	New Data Element
11/23/2010	CAFÉ	CA-129	For OCREE calculations, should N2O emissions always default to .010gpm?	New Data Element
11/23/2010	CAFÉ	CA-130	EPA Calculated Official Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-131	EPA Calculated Official Model Year GHG TLAAS Production Units	New Data Element
11/23/2010	CAFÉ	CA-132	Manufacturer Calculated Official Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-133	Manufacturer Calculated Official Model Year GHG TLAAS Production Units	New Data Element
11/23/2010	CAFÉ	CA-134	EPA Calculated Baseline Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-135	EPA Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-136	EPA Calculated Baseline Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-137	EPA Calculated Baseline Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-138	Manufacturer Calculated Baseline Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-139	Manufacturer Calculated Baseline Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-140	Manufacturer Calculated Baseline Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-141	Manufacturer Calculated Baseline Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-142	EPA Calculated Final Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-143	EPA Calculated Final Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-144	EPA Calculated Final Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-145	EPA Calculated Final Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-146	Manufacturer Calculated Final Average GHG Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-147	Manufacturer Calculated Final Average GHG TLAAS Unrounded 4 Decimal	New Data Element
11/23/2010	CAFÉ	CA-148	Manufacturer Calculated Final Average GHG Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-149	Manufacturer Calculated Final Average GHG TLAAS Rounded Whole Number	New Data Element
11/23/2010	CAFÉ	CA-150	Manufacturer Calculated Final Truck CAFE Rounded 1 Decimal	New Data Element

11/23/2010	CAFÉ	CA-151	EPA Official Average GHG Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-152	EPA Official Average GHG TLAAS Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-153	Manufacturer Calculated Official Average GHG Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-154	Manufacturer Calculated Official Average GHG TLAAS Grams Per Mile	New Data Element
11/23/2010	CAFÉ	CA-155	CAFE Domestic/Import Indicator	New Data Element
11/23/2010	CAFÉ	CA-156	GHG TLAAS Indicator	New Data Element
11/23/2010	CAFÉ	CA-157	GHG Advanced Technology Indicator	New Data Element
11/23/2010	CAFÉ	CA-158	Footprint Final Model Year GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-159	EPA Calculated Footprint Target GHG Value (grams per mile)	New Data Element
11/23/2010	CAFÉ	CA-160	Manufacturer Calculated Unrounded GHG Standard	New Data Element
11/23/2010	CAFÉ	CA-161	EPA Calculated Unrounded GHG Standard	New Data Element
11/23/2010	CAFÉ	CA-162	EPA Calculated Unrounded GHG Standard Discrepancy Value	New Data Element
11/23/2010	CAFÉ	CA-163	EPA Calculated Final GHG Standard	New Data Element
11/23/2010	CAFÉ	CA-164	Manufacturer GHG Comments	New Data Element
11/23/2010	CAFÉ	CA-165	EPA Calculated Baseline Model Type City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-166	EPA Calculated Baseline Model Type Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-167	EPA Calculated Baseline Model Type Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-168	EPA Calculated Baseline Model Type Combined GHG Value Whole Number	New Data Element
11/23/2010	CAFÉ	CA-169	EPA Calculated Final Model Type City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-170	EPA Calculated Final Model Type Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-171	EPA Calculated Final Model Type Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-172	EPA Calculated Final Model Type Combined GHG Value Whole Number	New Data Element
11/23/2010	CAFÉ	CA-173	EPA Calculated Model Type GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-174	EPA Calculated Baseline Base Level City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-175	EPA Calculated Baseline Base Level Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-176	EPA Calculated Baseline Base Level Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-177	EPA Calculated Final Base Level City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-178	EPA Calculated Final Base Level Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-179	EPA Calculated Final Base Level Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-180	EPA Calculated Base Level GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-181	EPA Calculated Baseline Configuration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-182	EPA Calculated Baseline Configuration Highway GHG Value 1 decimal	New Data Element

11/23/2010	CAFÉ	CA-183	EPA Calculated Baseline Configuration Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-184	EPA Calculated Final Configuration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-185	EPA Calculated Final Configuration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-186	EPA Calculated Final Configuration Combined GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-187	EPA Calculated Configuration GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-188	EPA Calculated Baseline Subconfiguration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-189	EPA Calculated Baseline Subconfiguration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-190	EPA Calculated Final Subconfiguration City GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-191	EPA Calculated Final Subconfiguration Highway GHG Value 1 decimal	New Data Element
11/23/2010	CAFÉ	CA-192	EPA Calculated Subconfiguration GHG Production Units	New Data Element
11/23/2010	CAFÉ	CA-193	Manufacturer Subconfiguration Final Model Year GHG Production Units	New Data Element
				Total New CAFÉ DE's: n=66
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-3	Process Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-0	Manufacturer Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-1	Model Year	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-4	CAFE/GHG Compliance Category	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-4.5	CAFE/GHG Final Status Indicator	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-53	EPA Calculated Official Model Year Truck CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-54	EPA Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-55	EPA Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-50	Manufacturer Calculated Official Model Year Truck CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-51	Manufacturer Calculated Official Model Year Domestic Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-52	Manufacturer Calculated Official Model Year Import Passenger Vehicle CAFE Production Units	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-59	EPA Calculated Baseline Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-60	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-61	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-63	EPA Calculated Baseline Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)

11/23/2010	CAFÉ	CA-66	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-67	EPA Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-70	EPA Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-71	EPA Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-56	Manufacturer Calculated Baseline Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-57	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-58	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-62	Manufacturer Calculated Baseline Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-64	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-65	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-68	Manufacturer Calculated Baseline Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-69	Manufacturer Calculated Baseline Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-75	EPA Calculated Final Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-76	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-77	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-79	EPA Calculated Final Truck CAFE Rounded 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-82	EPA Calculated Final Domestic Passenger Vehicle CAFE Unrounded Test Prodedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-83	EPA Calculated Final Import Passenger Vehicle CAFE Unrounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-86	EPA Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-87	EPA Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-72	Manufacturer Calculated Final Truck CAFE Unrounded 4 Decimal	Edit to DE Name & Feature(s)

11/23/2010	CAFÉ	CA-73	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-74	Manufacturer Calculated Final Import Passenger Vehicle CAFE Unrounded Unadjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-80	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-81	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 4 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-84	Manufacturer Calculated Final Domestic Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-85	Manufacturer Calculated Final Import Passenger Vehicle CAFE Rounded Test Procedure Adjusted 1 Decimal	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-91	EPA Official Truck CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-92	EPA Official Domestic Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-93	EPA Official Import Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-88	Manufacturer Calculated Official Truck CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-89	Manufacturer Calculated Official Domestic Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-90	Manufacturer Calculated Official Import Passenger Vehicle CAFE Miles Per Gallon	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-11	CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-14.1	Test Group	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-21.5	EPA Calculated Footprint Target FE Value (miles per gallon)	Edit to DE Name & Feature(s)
11/23/2010	CAFÉ	CA-22	EPA Calculated Unrounded Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-22.3	Calculated Unrounded Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-22.7	EPA Calculated Final Reformed CAFE Standard	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-25.1	Carline Manufacturer Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-110	EPA Calculated Baseline Configuration City FE Value 4 decimal	Edit to DE name
11/23/2010	CAFÉ	CA-31	Equivalent Test Weight (ETW)	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-124	Manufacturer Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-125	Division Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-126	Carline Code	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-34	Test Group	Edit to DE Feature(s)
11/23/2010	CAFÉ	CA-32	Manufacturer Subconfiguration Final Model Year FE Production Units	Edit to DE Feature(s)
				Total Edited CAFÉ DE's: n=61
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	CAFÉ	CA-21	Manufacturer Calculated Footprint Target FE Value (miles per gallon)	Deleted Data Element
11/23/2010	CAFÉ	CA-21.7	EPA Calculated Footprint Target FE Discrepancy Value	Deleted Data Element

11/23/2010	CAFÉ	CA-119	EPA Calculated Baseline Subconfiguration Combined FE Value 4 decimal	Deleted Data Element
11/23/2010	CAFÉ	CA-122	EPA Calculated Final Subconfiguration Combined FE Value 4 decimal	Deleted Data Element
				Total Deleted CAFÉ DE's: n=4
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	FE Label	GL-78.2	Model Type Descriptor	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.1	5 Cycle Hybrid Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.2	Charge Depleting Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-79.3	Charge Sustaining Fuel Economy Label Calculation Approach	Edit to DE Feature(s)
11/23/2010	FE Label	GL-123	Equivalent Test Weight (ETW)	Edit to DE Feature(s)
11/23/2010	FE Label	GL-130.5	Test 5-Cycle Category	Edit to DE Feature(s)
11/23/2010	FE Label	GL-173.1	Manufacturer-Calculated Gas Guzzler Mile Per Gallon	Edit to DE Feature(s)
				Total Edited FE Label DE's: n=7
Date	Dataset	Data Element	Data Element Name	Description of Change
11/23/2010	Road Load	RL-1	Process Code	Edit to DE Feature(s)
11/23/2010	Road Load	RL-1.5	Road Load Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-1.6	Model Year	Edit to DE Feature(s)
11/23/2010	Road Load	RL-2	FE Label Model Type Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-3	FE Label Subconfiguration Index	Edit to DE Feature(s)
11/23/2010	Road Load	RL-4	Test Group	Edit to DE Feature(s)
11/23/2010	Road Load	RL-5	Engine Code	Edit to DE Feature(s)
11/23/2010	Road Load	RL-5.1	Equivalent Engine Code(s)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-6	In-Use Engine Code Decoder	Edit to DE Feature(s)
11/23/2010	Road Load	RL-7	Displacement	Edit to DE Feature(s)
11/23/2010	Road Load	RL-14	Transmission as listed in the FE Guide	Edit to DE Feature(s)
11/23/2010	Road Load	RL-15	Axle Ratio	Edit to DE Feature(s)
11/23/2010	Road Load	RL-16	Rim and tire size	Edit to DE Feature(s)
11/23/2010	Road Load	RL-17	Tire Type	Edit to DE Feature(s)
11/23/2010	Road Load	RL-18	Tire Manufacturer	Edit to DE Feature(s)
11/23/2010	Road Load	RL-19	N/V Ratio	Edit to DE Feature(s)
11/23/2010	Road Load	RL-20	Curb Weight	Edit to DE Feature(s)
11/23/2010	Road Load	RL-21	ETW	Edit to DE Feature(s)
11/23/2010	Road Load	RL-22	Manufacturer-Calculated Total Road Load Horsepower	Edit to DE Feature(s)
11/23/2010	Road Load	RL-24	Target Coefficient A (F0) (lbf)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-25	Target Coefficient B (F1) (lbf/mph)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-26	Target Coefficient C (F2) (lbf/mph**2)	Edit to DE Feature(s)
11/23/2010	Road Load	RL-27	Road Load Determination Method	Edit to DE Feature(s)
				Total Edited Road Load DE's: n=23