CHRYSLER

December 9, 2011

Mr. Frank Borris, Director

Vehicle Integrity Division (VID), NVS-212
U.S. Department of Transportation

National Highway Traffic Safety Administration (NHTSA)
Office of Defects Investigation (ODI)
Room W48-314
1200 New Jersey Avenue SE
Washington, D.C. 20590

Reference: NVS-213cla; EA11-001.03

Dear Mr. Borris:

Attached is Chrysler Group LLC's ("Chrysler") response to the referenced inquiry. By providing the information contained herein, Chrysler is not waiving its claim to attorney work product and attorney-client privileged communications.

Chrysler has conducted a reasonable and diligent search of its data repositories and has included the information in the attached response and enclosures.

Sincerely,

David D. Dillon

Attachment and Enclosures

Preliminary Statement

On April 30, 2009 Chrysler LLC, the entity that manufactured and sold the vehicles that are the subject of this Information Request, filed a voluntary petition for relief under Chapter 11 of Title 11 of the United States Bankruptcy Code.

On June 10, 2009, Chrysler LLC sold substantially all of its assets to a newly formed company now known as Chrysler Group LLC. Pursuant to the sales transaction, Chrysler Group LLC assumed responsibility for safety recalls pursuant to the 49 U.S.C. Chapter 301 for vehicles that were manufactured and sold by Chrysler LLC prior to the June 10, 2009 asset sale.

On June 11, 2009, Chrysler LLC changed its name to Old Carco LLC. The assets of Old Carco LLC that were not purchased by Chrysler Group LLC, as well as the liabilities of Old Carco that were not assumed, remain under the jurisdiction of the United States Bankruptcy Court – Southern District of New York (*In re Old Carco LLC, et al*., Case No. 09-50002).

Note: Unless indicated otherwise in the response to a question, this document contains information through October 7, 2011, the date the information request was received.

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1. State, by peer vehicle model year, model, and engine the number of peer vehicles Chrysler has manufactured for sale or lease in the United States. Separately, for each peer vehicle manufactured to date by Chrysler, state the following:

a. Vehicle identification number (VIN);
b. Model;
c. Model Year;
d. Date of manufacture;
e. Date warranty coverage commenced; and
f. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2007, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

A1. The subject peer vehicles for the US market are the 2007 – 2012 model year (MY) Dodge Ram 2500, 3500, 4500, and 5500 vehicles and referred to as the body model DH, DJ, D1, D2, DC, DM, and DP. The total number of subject peer vehicles manufactured by Chrysler for sale or lease for the US market was 395,627.

Per correspondence from ODI, all other questions relate to 2009-2012 MY with the exception of question 13, part sales, which covers 2007-2012 MY.

The detailed response that lists the production data is provided in Enclosure 1 as a Microsoft Access 2010 table titled “PRODUCTION DATA (EA11-003).”

2. State, by model and model year the number of each of the following received by Chrysler or of which Chrysler is otherwise aware, which relate to, or may relate to, instances of the subject condition in the peer vehicles; including subtotals for the numbers alleging subject component failure and the numbers alleging engine stall occurred:

a. Consumer complaints, including those from fleet operators;
b. Field reports, including dealer field reports;
c. Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a peer vehicle, property damage claims, consumer complaints, or field reports;
d. Property damage claims;

e. Third-party arbitration proceedings where Chrysler is or was a party to the arbitration; and
f. Lawsuits, both pending and closed, in which Chrysler is or was a defendant or codefendant.

For subparts "a" through "d" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "f," provide a summary description of the alleged problem and causal and contributing factors and Chrysler's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

A2. The following summarizes the reports identified by Chrysler that relate to, or may relate to, the alleged condition in the subject peer vehicles. Chrysler has conducted a reasonable and diligent search of the normal repositories of such information.

a. There are 28 consumer complaints (Customer Assistance Inquiry Request or CAIR) that may relate to the alleged condition for the subject peer vehicles, which represents 25 unique VINs.

b. There are no field reports for the alleged condition in the subject peer vehicles.

c. There are no reports of the alleged condition resulting in crash, fire, injury or fatality for the subject peer vehicles.

d. There are no reports of the alleged condition resulting in property damage for the subject peer vehicles.

e. There are no third-party arbitration proceedings with Chrysler relating to the alleged condition and the subject peer vehicles.

f. There are no legal claims involving the subject peer vehicles for the alleged condition.

Based on the analysis of these complaints for the subject peer vehicles, Chrysler has determined that there are a total of 28 complaints which represent 25 unique VINs. Based on correspondence from ODI, Chrysler has included reports that relate or may relate to the subject condition.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

a. **Chrysler file number or other identifier used;**
b. **The category of the item, as identified in Request No.2 (i.e., consumer complaint, field report, etc.);**
c. **Vehicle owner or fleet name (and fleet contact person), address, and telephone number;**
d. **Vehicle's VIN;**
e. **Vehicle's model and model year;**
f. **Vehicle's mileage at time the subject condition was observed or occurred (incident);**
g. **Incident date;**
h. **Report or claim date;**
i. **Whether failure or malfunction of the subject component is alleged; ;**
j. **Whether fuel quality concerns are cited as an actual or potential cause or contributor;**
k. **Whether an engine stall is alleged;**
l. **Whether a crash is alleged;**
m. **Whether property damage is alleged;**
n. **Number of alleged injuries, if any; and**
o. **Number of alleged fatalities, if any.**

Provide this information in Microsoft Access 2007, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre- formatted table which provides further details regarding this submission.

A3. The detailed response that lists the customer complaints (there are no field reports, legal claims or lawsuits) from Request No. 3, as requested in Items a. through o. is provided in Enclosure 3 - CONF BUS INFO - Request Number 2 Data, in a Microsoft Access 2010 table, titled “REQUEST NUMBER TWO DATA (EA11-003) CONF BUS INFO.mdb” which has been submitted under separate cover to the NHTSA Chief Counsel’s Office with a request for confidential treatment.

3. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.)

and describe the method Chrysler used for organizing the documents.

A4. Copies of all documents within the scope of Request No. 2 are provided in Enclosure 4 - CONF BUS INFO - Field Data which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. There are no Field Reports or Legal Claims for the customer complaints. There is a CAIR summary file submitted in EA11-003 CAIRS Report.pdf file with the related documents arranged in folders by CAIR number.

5. State, by peer vehicle model year, model, and engine the number of each of the following, received by Chrysler, or of which Chrysler is otherwise aware, which relate to, or may relate to, acknowledged incidents of misfuelling in the peer vehicles (e.g., requests for technical assistance related to repair procedures):

a. **Consumer reports, including those from fleet operators;**
b. **Field reports, including dealer field reports;**
c. **Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a peer vehicle, property damage claims, consumer complaints, or field reports; and**
d. **Property damage claims.**

For subparts "a" through "d" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

A5. The following summarizes the reports identified by Chrysler that relate to, or may relate to, acknowledged incidents of misfuelling in the subject peer vehicles (e.g., requests for technical assistance related to repair procedures). Chrysler has conducted a reasonable and diligent search of the normal repositories of such information.

a. There are 37 consumer complaints (Customer Assistance Inquiry Request or CAIR) that may relate to the alleged condition for the subject peer vehicles, which represents 35 unique VINs.

b. There are no field reports for the alleged condition in the subject peer vehicles.

c. There are no reports of the alleged condition resulting in crash, injury or fatality for the subject peer vehicles. There are no third-party arbitration proceedings with Chrysler relating to the alleged condition and the subject peer vehicles. There are no legal claims involving the subject peer vehicles for the alleged condition.

d. There are no reports of the alleged condition resulting in property damage for the subject peer vehicles.

Based on the analysis of these complaints for the subject peer vehicles, Chrysler has determined that there are a total of 37 complaints which represent 35 unique VINs.

6. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No.5, state the following information:

a. **Chrysler file number or other identifier used;**
b. **The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);**
c. **Vehicle owner or fleet name (and fleet contact person), address, and telephone number;**
d. **Vehicle's VIN;**
e. **Vehicle's model and model year;**
f. **Vehicle's mileage at time of incident;**
g. **Misfuelling incident date;**
h. **Report or claim date;**
i. **Whether failure or malfunction of the subject component is alleged;**
j. **Whether an engine stall is alleged;**
k. **Whether a crash is alleged;**
l. **Whether property damage is alleged;**
m. **Number of alleged injuries, if any; and**
n. **Number of alleged fatalities, if any.**

Provide this information in Microsoft Access 2007, or a compatible format, entitled "MISFUELLING DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

A6. The detailed response that lists the customer complaints (there are no field reports, legal claims or lawsuits) from Request No. 5, as requested in Items a. through n. is provided in Enclosure 6 - CONF BUS INFO - Request Number 5 Data, in a Microsoft Access 2010 table, titled “MISFUELLING DATA (EA11-003)

CONF BUS INFO.mdb" which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

7. Produce copies of all documents related to each item within the scope of Request No. 5. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Chrysler used for organizing the documents.

A7. Copies of all documents within the scope of Request No. 5 are provided in Enclosure 7 - CONF BUS INFO - Field Data which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. There are no Field Reports or Legal Claims and for the customer complaints, there is a CAIR summary file submitted in EA11-003 Misfuel CAIRS Report.pdf file with the related documents arranged in folders by CAIR number.

8. State, by model, engine and model year the number of the following categories of claims, collectively, that have been paid by Chrysler to date which relate to repair or replacement of the subject component in the peer vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

a. **Chrysler claim number;**
b. **Vehicle owner or fleet name (and fleet contact person) and telephone number;**
c. **VIN;**
d. **Repair date;**
e. **Vehicle mileage at time of repair;**
f. **Repairing dealer's or facility's name, telephone number, city and state or ZIP code;**
g. **Labor operation number;**
h. **Problem code;**
i. **Replacement part number(s) and description(s);**
j. **Concern stated by customer;**
k. **Cause and correction of concern;**
l. **Comment, if any, by dealer/technician relating to claim and/or repair;**
m. **State whether there is a claim for towing expenses associated with the repair (i.e., filed within 5 days before or after the claim repair date); and**

n. **Chrysler's assessment of whether the incident involved an engine stall while driving using the following three categories: (1) stall while driving= "yes;" (2) stall while driving= no; and (3) stall while driving= "unknown."**

Provide this information in Microsoft Access 2007, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

A8. The total number of warranty claims that may relate to the subject condition, for the subject peer vehicles, are listed below. The detailed response that lists the warranty claims, for the subject peer vehicles, as requested in Items a. through n. is provided in Enclosure 8 - CONF BUS INFO - Warranty Data, in a Microsoft Access 2010 table, titled WARRANTY DATA (EA11-003) CONF BUS INFO.mdb, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment, which contains the warranty data.

Claim Description (may relate to alleged condition):	Number of Warranty Claims
High Pressure Fuel Pump (HPFP) Replacement (2009 – 2012 Ram Subject Peer Vehicles)	146

Chrysler believes that over 100 or 2/3 of the warranty claims are not related to the condition that is being investigated, misfuelling or poor fuel quality.

9. Describe in detail the search criteria used by Chrysler to identify the claims identified in response to Request No. 8, including the labor operations, problem codes, part numbers and any other pertinent parameters used and describe how the assessment regarding whether the repair condition resulted in an engine stall incident was made (e.g., analysis of problem codes or customer concern/technician comment text fields). Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to repair or replacement of the subject component and a separate list that are applicable to assessing whether the repair condition resulted in an engine stall while driving incident. State, by make and model year, the terms of the new vehicle warranty coverage offered by Chrysler on the peer vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Chrysler offered for the peer vehicles and state by option, model, and model year, the

number of vehicles that are covered under each such extended warranty.

A9. The service part numbers, labor operation code (LOP), and failure codes used by Chrysler to identify HPFP warranty claims are noted in the charts below. Chrysler purchases the HPFP in the engine assembly from Cummins and does not have a production part number for the HPFP. In conducting its search, Chrysler only included warranty claims where the following conditions were met:

- a service part number for a HPFP was included
- a warranty claim LOP
- a failure code for a HPFP listed below were found.

HPFP Service Part Numbers
R8027022AA (Remanufactured)
R8027022AB (Remanufactured)
R8027022AC (Remanufactured)
68027022AA
68027022AB
68027022AC
R5191780AA (Remanufactured)
R5191780AB (Remanufactured)
R5191780AC (Remanufactured)
R5191780AD (Remanufactured)
05191780AA
05191780AB
05191780AC
05191780AD

Description of Repair	Labor Operation
Pump, diesel fuel high pressure injection – replace	14450102

Failure Code	Code Descriptions
ML	Check engine/service engine soon
NP	Sags, hesitates and no power
NS	No start
PI	Poor idle
11	Broken or cracked
31	Rough idle
41	Foreign material
43	Fuel leak

71	Oil leak
NA	Unknown
UC	Uncodeable

Chrysler believes that failure codes 43 and 71 are not related to the condition that is being investigated, misfuelling or poor fuel quality. These failure codes account for over 100 warranty claims or more than 2/3 of the total warranty claims. Chrysler believes that the failure code "ML" is the most likely to be related to the alleged condition of misfuelling or poor fuel quality. Chrysler has 15 warranty claims for this condition.

The standard warranty coverage offered by Cummins and administered by Chrysler for the subject peer vehicles for the HPFP is 5yrs/50,000 miles. There was no extended warranty coverage for the subject components, but there were service contract coverage options available for purchase through Chrysler's authorized dealers which extend coverage on the subject components. Beyond standard warranty coverage, LOP 14450102 (Pump, diesel fuel high pressure injection – replace) is covered by such contracts, for the subject peer vehicles. The number of contracts sold by Chrysler for both the subject peer vehicles that extend coverage on the subject components is listed in Enclosure 9 - CONF BUS INFO - Extended Warranty Sales, titled 2009-2012 Ram Diesel High Pressure Fuel Pump Extended Warranty Volumes.pdf which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment.

Any service contract claims for the applicable labor operation codes are included in the warranty data being provided in response to Question No. 9. Chrysler notes that owners may also have the opportunity to purchase additional service contract coverage through other third-party providers, but Chrysler does not have access to that data.

10. Produce copies of all service, warranty, and other documents that Chrysler has issued to any Dealers, regional or zone offices, field offices, fleet purchasers, or other entities, which relate to or may relate to the subject condition in the peer vehicles. This includes, but is not limited to, technical service bulletins, special service messages, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Chrysler is planning to issue within the next 120 days.

A10. Located within Enclosure 10 - Dealer-Field Communication, are 6 folders which contain the service bulletins, diesel owner's manuals, quick reference guides, warranty booklets, vehicle labels and service manuals for the 2009-2012 Dodge Ram vehicles.

11. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to HPFP drive train durability and performance with low lubricity fuels that have been conducted, are being conducted, are planned, or are being planned by, or for, Chrysler. For each such action, provide the following information:

a. **Action title or identifier;**
b. **The actual or planned start date;**
c. **The actual or expected end date;**
d. **Brief summary of the subject and objective of the action;**
e. **Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and**
f. **A brief summary of the findings and/or conclusions resulting from the action.**

The response to this request should include a detailed description of all past, present and future actions by any and all engineering working groups (e.g., pump/engine damage task force) of which VW and/or Audi are active members or are otherwise aware. This includes, at a minimum, all of the information requested in items "a" through "f."

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

A11. The diesel engine used in the subject peer vehicles is purchased from Cummins as an outside design development (ODD) component. The specific markets in which a vehicle is going to be sold in is communicated to Cummins. Chrysler does not perform any specific high pressure fuel pump tests. Chrysler does conduct vehicle level durability/reliability testing with fuels representing the specific markets that it is sold in.

12. Describe all modifications or changes made by, or on behalf of, Chrysler in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to HPFP drivetrain durability and performance with low lubricity fuels. For each such modification or change, provide the following information:

a. **The date or approximate date on which the modification or change was incorporated into vehicle production;**
b. **A detailed description of the modification or change;**
c. **The reason(s) for the modification or change;**

d. **The part number(s) (service and engineering) of the original component;**
e. **The part number(s) (service and engineering) of the modified component;**
f. **Whether the original unmodified component was withdrawn from production and/or sale, and if so, when; and**
g. **When the modified component was made available as a service component.**

A12. The requested information is summarized below.

a. Chrysler purchases the diesel engine as an ODD component from Cummins. Cummins is provided all of Chrysler's functional requirements and is required to meet them as part of the supplier agreement. Chrysler does not drive specific changes if the component meets its requirements. Therefore, Chrysler has not directed any changes to this component for HPFP drivetrain durability and performance with low lubricity fuels.

b. Same as question a.

c. Chrysler is not aware of any changes made to the component to specifically address HPFP drivetrain durability and performance with low lubricity fuels.

d. Chrysler purchases the diesel engine as an assembly as an ODD component from Cummins and does not have a production part number for the HPFP. For service, Chrysler has released service part numbers. See the figure 1 below:

Diesel High Pressure Fuel Pump 6.7L Service Parts From 2009 - 2012
R8027022AA (Remanufactured)
R8027022AB (Remanufactured)
R8027022AC (Remanufactured)
68027022AA
68027022AB
68027022AC

Diesel High Pressure Fuel Pump 5.9L Service Parts for 2009
R5191780AA (Remanufactured)
R5191780AB (Remanufactured)
R5191780AC (Remanufactured
R5191780AD (Remanufactured
05191780AA
05191780AB
05191780AC
05191780AD

Figure 1. Service Part Numbers

e. See figure 1 above.

f. The original service part is interchangeable with all subsequent part levels, with preference for the latest level part within each engine family (6.7L vs. 5.9L).

g. Service parts are released at the vehicle production release for dealers to order service parts as required.

13. For each month in which Chrysler has sold the following components, state the number of the following components that Chrysler has sold for use in the peer vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle(s) in which it is used and month/year of sale of the component (including the cut-off date for sales, if applicable).

a. High-pressure fuel pumps;
b. Fuel rails; and
c. Fuel tanks.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles (that is, other than peer vehicles) of which Chrysler is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

A13. Based on correspondence from ODI dated October 21, 2011, high pressure fuel pumps part sales information is being provided for 2007-2011 calendar year only. Part sales information is included in Enclosure 13 - CONF BUS INFO - Part Sales which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. Mopar part sales by model and model year of the subject component are not VIN-specific. Chrysler is providing part sales from January 2007 through October 7, 2011, by monthly sales for each HPFP service part number. The subject component replacement parts are not used on any other Chrysler vehicles, but are used on the 2009 Sterling Bullet, which was manufactured by Chrysler. The Sterling Bullet is not serviced by the Chrysler dealer network, see Enclosure 10 - Dealer-Field Communication, Service Bulletins, 2009 Sterling Warranty Bulletin.pdf. The table includes all subject component service part sales, whether or not they are related to the alleged condition.

14. Provide the following information for the common rail fuel systems used in the peer vehicles:

a. **Basic functional diagrams of each version of common rail system used in the peer vehicles, showing system components and flow paths;**
b. **Ranges of operating pressures for the suction and discharge of the HPFP (i.e., low and high pressure systems);**
c. **Range in operating temperatures for fuel used in the HPFP lubrication system and a description of how HPFP inlet temperature is controlled;**

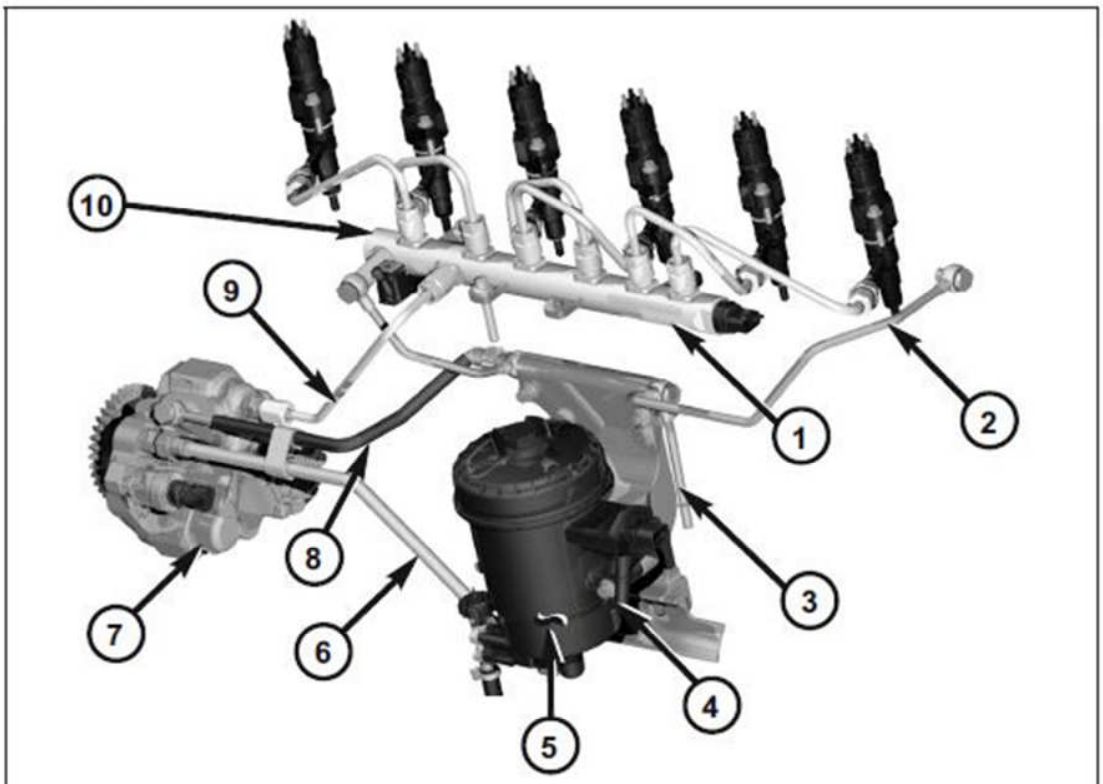
d. **Filter mesh size(s) and filter replacement criteria;**
e. **Describe all scheduled maintenance requirements;**
f. **A description of all warning lamps and driver information messages associated with the system;**
g. **A description of all Diagnostic Trouble Codes by name and number and the conditions required to set each code; and**
h. **A description of all limp-home operating modes, including the conditions required to implement each mode and the limits on vehicle operation.**

A14. The requested information is summarized below.

The subject peer vehicles were equipped with two different diesel engines for the 2009 MY, a 5.9L and 6.7L. The 5.9L engine was limited to usage on underground mining vehicles, and limited to 25 MPH. The 2009 MY 5.9L diesel engine accounted for 208 vehicles. For the purpose of this response, Q14 through Q19 will be answered only for the 6.7L diesel engine.

a. Figure 2 shows the basic functional diagram for a 6.7L diesel engine used in the subject peer vehicles.

FUEL FLOW



1	High-pressure Fuel Rail	6	Filtered Fuel Supply to High-pressure Pump
2	Injector Return from Cylinder Head	7	High-pressure Fuel Pump
3	Combined Fuel Return	8	Fuel Return from High-pressure Pump
4	Fuel Supply from Tank	9	High-pressure Fuel From Pump
5	Fuel Filter Assembly	10	Fuel Pressure Limiting Valve

Figure 2. Basic Common Rail Functional Diagram

b. The range of operating pressures for the suction and discharge of the HPFP are: -2.9 psi to 11.5 psi and 4,351 psi to 26,107 psi respectively.

c. To date, Chrysler has been unable to determine the range of operating temperatures for fuel used in the HPFP lubrication system. The HPFP inlet fuel temperature is not controlled and is function of the fuel supply temperature.

d. The subject peer vehicles launched with a single stage filter that stripped water and particles down to 7 microns. In 2009.5MY the design went to a dual stage filter. In the duel stage the first stage strips water from the fuel

and particles down to 10 micron in size, while the second stage filters remove particles down to 5 micron in size.

e. Refer to Enclosure 10 - Dealer-Field Communication, folder Diesel Owner's Manual for the scheduled maintenance requirements.

f. Refer to Enclosure 10 - Dealer-Field Communication, folder Diesel Owner's Manual for the warning lamp and driver information messages.

g. Refer to Enclosure 14 -Diagnostic Trouble Codes for the file containing the diagnostic trouble codes relating to common rail fuel systems. Enclose 10 – Dealer-Field Communication, folder Service Manuals, also contains all of the diagnostic trouble codes for the subject peer vehicle.

h. There are no limp home modes relating to common rail fuel systems within the subject peer vehicles.

15. Separately for each peer vehicle, provide the following information for the subject component used in that vehicle:

a. Specific supplier model name and model number;
b. Cross-sectional diagram of the pump showing basic operation of the drive train;
c. Ratio of pump speed to engine speed;
d. Pump maximum output/discharge pressure;
e. Pump minimum inlet/suction pressure;
f. Pump durability specifications;
g. The material composition and material specifications for all drive train components (e.g., plunger, plunger base, shoe, foot, rider, roller, roller shoe, cam); and
h. Copies of all failure mode and effects analyses.

A15. The requested information is summarized below.

a. The HPFP in the subject peer vehicles comes to Chrysler as an ODD part of the diesel engine assembly from Cummins. The subject peer vehicles use Bosch's CP3.3NH HPFP.

b. A cross-sectional diagram for the HPFP used in the subject peer vehicles is shown in Figure 3.

Figure 3 CP3.3NH HPFP Cross-sectional Diagram

c. The ratio of pump speed to engine speed is 1:1 in the subject peer vehicles.

d. The maximum output/discharge pressure is 26,107 psi in the subject peer vehicles.

e. The minimum inlet/suction pressure is -2.9 psi in the subject peer vehicles.

f. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not perform any specific tests for HPFP durability. Chrysler only performs full vehicle level durability/reliability testing.

g. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not have the material composition or material specifications for the HPFP components.

h. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Failure mode and effect analysis (FMEA) of the diesel engine and components used in the subject peer vehicles is not in Chrysler's possession.

16. Provide the following information regarding the subject component from peer vehicles:

a. Any information, reports, and analyses regarding returned parts that exhibited signs of wear or other deterioration of the drive train; and
b. A tabular summary of all field return analyses and reports.

A16. Chrysler has only received one returned HPFP from the subject peer vehicles, from the field which has been analyzed by the supplier. The pump was found to conform to all performance specifications. Enclosure 16 - CONF BUS INFO - Part Return Analysis contains the returned part report.

17. Provide the following information regarding diesel fuels sold in the United States, and test fuels used by or for Chrysler in the design and development of the fuel system and subject component:

a. **Identify and provide copies of all studies and surveys conducted by or for Chrysler and other documents in the possession of and reviewed by Chrysler regarding diesel fuel quality .or characteristics in the U.S., and/or diesel fuel delivery system performance concerns related to fuel quality in the United States market from 2004 to date;**
b. **Describe the fuel properties Chrysler considers in its evaluations of HPFP performance/durability and state the ranges in those properties that Chrysler believes exist in the United States market, from fuel survey data or other sources (provide the means and standard deviations for all sampled data for the United States market);**
c. **State the specifications for all reference fuels used by Chrysler in testing the subject component, including an explanation of the basis for the lubricity specification;**
d. **Describe how Chrysler has ensured that the HPFP design in peer vehicles is compatible with diesel fuels sold in the United States and other markets;**
e. **Describe all testing of the subject component conducted by, or for, Chrysler with gasoline contaminated test fuels, including the purpose of the test, the amount of contamination, the test conditions and the test results;**
f. **Provide Chrysler's assessment of the amounts of gasoline contamination required to produce the following effects on engine performance: (1) driveability symptoms during city driving (describe symptoms); (2) driveability symptoms during highway driving (describe symptoms); (3) engine stall; and (4) pump damage; and (5) sudden/catastrophic pump failure;**
g. **Provide Chrysler's assessment of the effects of minor gasoline contamination on engine performance and HPFP performance/durability (provide assessments for contaminations of less than 3 percent and less than 1 percent); and**

h. **Produce copies of all recommendations and warnings regarding diesel fuel quality that Chrysler has provided to its customers.**

A17. The requested information is summarized below.

a. Chrysler has in its possession diesel fuel surveys from the American Automobile Manufactures' Association (AAMA), International Fuel Surveys which contain fuel survey data for the United States. Chrysler's understanding is that this information has been previously supplied by Volkswagen Group Of America during its PE10-034. Chrysler also has diesel fuel survey data provided to Chrysler by Infineum. The surveys from Infineum are:
    a. Worldwide Winter Diesel Fuel Quality Survey 2004
    b. Diesel Fuel Quality Trends 2005
    c. North American Diesel Fuel Trends 2007
    d. Worldwide Winter Diesel Fuel Quality Survey 2008
    e. North American Diesel Fuel Trends 2009
    f. Worldwide Winter Diesel Fuel Quality Survey 2010

    These surveys contain copyright designations, and it is Chrysler's understanding that Infineum USA L.P. is the copyright owner. Chrysler is producing these surveys here with the knowledge and consent of Infineum USA L.P. These surveys are located in Enclosure 17 – Infineum Fuel Surveys.

b. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not perform any specific tests for HPFP durability. Chrysler only performs full vehicle level durability/reliability testing. Chrysler does not define the diesel fuel properties. Chrysler specifies the markets, which the subject peer vehicles are going to be sold, to Cummins. Chrysler relies on Cummins to determine if the engine is compatible with each markets fuel.

c. The diesel fuel specifications Chrysler uses in testing the subject peer vehicles are located in Enclosure 17 - CONF BUS INFO - Material Standards, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. Chrysler specifies the lubricity specification based on ASTM and fuel supplier specifications.

d. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler specifies the markets, which the subject peer vehicles are going to be sold, to Cummins. Chrysler relies

on Cummins to determine if the engine is compatible with each market's fuel.

e. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not conduct any diesel fuel testing with contamination of gasoline. The subject peer vehicles equipped with Cummins diesel engines are designed to operate only on the fuels defined in the Enclosure 10 - Dealer-Field Communication, Diesel Owner's Manuals.

f. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not have an assessment of gasoline contaminated fuel in the subject peer vehicles. The subject peer vehicles equipped with Cummins diesel engines are designed to operate only on the fuels defined in the Enclosure 10 - Dealer-Field Communication, Diesel Owner's Manuals.

g. The diesel engine in the subject peer vehicles is supplied as an ODD component to Chrysler by Cummins. Chrysler does not have an assessment of less than 3 percent and less than 1 percent gasoline contaminated diesel fuel in the subject peer vehicles. The subject peer vehicles equipped with Cummins diesel engines are designed to operate only on the fuels defined in the Enclosure 10 - Dealer-Field Communication, Diesel Owner's Manuals.

h. Located within Enclosure 10 - Dealer-Field Communication, are folders which contain the owner's manuals, quick reference guides, vehicle labels and warranty booklets for the 2009-2012 Dodge Ram vehicles. These folders contain the recommendations and warnings regarding diesel fuel quality and type.

18. Provide the following information regarding incidents/repairs in which misfuelling is not acknowledged but suspected in the peer vehicles (Note: the IR definitions for "misfuelling" and "fuel quality concern" do not apply to this request):

a. Does Chrysler distinguish problems from misfuelling from problems involving poor fuel quality for the purposes of determining whether or not repairs to the subject component and/or vehicle are covered by warranty?

b. Describe how Chrysler distinguishes incidents involving misfuelling from incidents involving poor fuel quality in resolving questions about warrantable repairs (e.g., describe test methods, qualitative analyses, performance symptoms or diagnostic codes that would indicate or suggest misfuelling);

c. State how Chrysler resolves disputes concerning warranty coverage related to suspected fuel quality concerns;
d. Describe and provide copies of all guidance provided to dealers and/or zone offices related to diagnosing, documenting and repairing fuel system failures in which fuel quality is a suspected cause or contributor;
e. Describe the repair procedures for a peer vehicle that has been fueled with gasoline, for situations where (1) the engine was not started after a misfuel; and (2) the engine was started after a misfuel;
f. Describe the repair procedures for a peer vehicle that has experienced catastrophic HPFP drive train failure (i.e., metallic particles/debris in the fuel system); and
g. Describe all misfuel countermeasures that Chrysler has implemented in the peer vehicles or is considering for future production light duty diesel vehicles in the United States market.

A18. The requested information is summarized below.

a. Chrysler makes no such distinction for purposes of determining warranty coverage. The subject vehicles equipped with Cummins diesel engines are designed to operate only on the fuels defined in the Enclosure 10 - Dealer-Field Communication, Diesel Owner's Manuals. As noted in the warranty coverage booklets, the Cummins Diesel Engine Limited Warranty does not cover the costs of repairing damage caused by the use of contaminated fuels or from the use of fuels other than those recommended in the Owner's Manual (see Enclosure 10 - Dealer-Field Communication – Warranty Booklets). Dealer technicians may, however, seek to determine which type of non-approved fuel was used for purposes of diagnosing the fuel system damage and offering the recommended repair.

b. See response to subpart a.

c. Chrysler follows the terms of the Cummins Diesel Engine Limited Warranty, which is provided to the original purchaser (see Enclosure 10 - Dealer-Field Communication – Warranty Booklets). If the vehicle owner's warranty claim is not resolved to the satisfaction of the owner, they may choose to follow Chrysler's customer complaint process or seek remedies available under applicable law.

d. Located within Enclosure 10 - Dealer-Field Communication, are folders which contain the service bulletins and service manuals for the subject peer vehicles. These folders contain the guidance provided to dealers and or business centers related to diagnosing, documenting and repairing fuel system failures in which fuel quality is suspected.

e. Located within Enclosure 10 - Dealer-Field Communication, are folders which contain the service bulletins and service manuals for the subject peer vehicles. These folders contain the guidance provided to dealers and or business centers related to diagnosing, documenting and repairing fuel system failures in which fuel quality is suspected.

f. Located within Enclosure 10 - Dealer-Field Communication is a folder which contains the service manuals for the subject peer vehicles. This folder contains the guidance provided to dealers and or business centers related to diagnosing a catastrophic HPFP drivetrain failure.

g. Located within Enclosure 10 - Dealer-Field Communication, are folders which contain the owner's manuals, quick reference guides, warranty booklets, and vehicle labels for the subject peer vehicles. Within these folders are the countermeasures Chrysler communicates to the customer.

Owners and operators are instructed to use only high quality Ultra Low Sulfur Diesel Fuel in the subject vehicles and follow the recommended service maintenance schedule. Other fuel specifications and warnings appear as graphics within the cluster and on the fuel cap. Various instructions and warnings also appear in at least five different locations between the Owner's Manuals and Warranty Booklets, which are included in Enclosure 10 - Dealer-Field Communication, Diesel Owner's Manuals and Warranty Booklets.

19. Provide Chrysler's assessment of the subject component failure experience in the peer vehicles, including:

a. The causal or contributory factors, including but not limited to misfuel and fuel quality concerns;
b. The approximate percentages of subject component failures associated with each of the causal/contributory factors identified in item "a;"
c. The failure mechanism for each causal condition identified;
d. The failure mode for each causal condition identified, including the effect on engine performance (e.g., driveability concern, engine stall); and
e. A comparison, by model and model year, of the HPFP warranty claim rates and part sales rates in the peer vehicles and HPFP failure rates for same/similar vehicles in other worldwide markets (e.g., Germany, France, United Kingdom, Russia, China, India, Japan, Brazil, and Canada). [Please note any differences between vehicle designs and market fuel distribution/quality that Chrysler believes may affect this analysis].

A19. While there have been relatively few reported HPFP failures in the subject peer vehicles, most of these failures were determined to be caused by improper or poor quality fuel being used and/or a lack of proper maintenance. Chrysler has determined that there is not a design or manufacturing defect with the HPFP in the subject peer vehicles.

The requested information is summarized below.

a. The contributing factors for the HPFP issues seen by Chrysler in the subject peer vehicles are poor maintenance, water in fuel, improper fuel put into vehicle, dirty fuel, and HPFP quality.

b. The breakdown from the 60 customer complaints in the subject peer vehicles are improper fuel (35), poor maintenance (3), water in fuel or dirty fuel (10), undetermined (12).

c. The failure mechanism cannot be determined from the information provided to Chrysler. Chrysler has not discovered any design or manufacturing issues with the HPFP. Of the reported instances of HPFP failure, it is believed that the contributing factors for the HPFP issues seen by Chrysler in the subject peer vehicles are poor maintenance (fuel filter not maintained), water in fuel, improper fuel put into vehicle, dirty fuel, and undetermined.

d. The failure mode was poor maintenance, poor fuel, pump quality issue, improper fuel put on into the vehicle. The effect on the vehicle drivability cannot be determined in every case, but ranged from no effect to non-running/no start condition.

e. The comparison by model and model year of the subject peer vehicles of HPFP warranty claim rates for the United States and Canada are shown in Enclosure 19 - CONF BUS INFO - Warranty Rates, which has been submitted under separate cover to the NHTSA Chief Counsel's Office with a request for confidential treatment. Chrysler is unable to calculate the part sales rates by model and model year, because Mopar part sales of the subject component are not VIN-specific.