

**This is an
OIL ANALYSIS UPDATE
and follow-up to DPI Message # 608.**

There has been a lot of conversation recently within the North Carolina Counties about this topic so we wanted to add anything we could to help you with your Thomas Built Buses.

OIL ANALYSIS is critical when running the best fleet possible. We think this additional information will help you.

We contacted representatives from Cummins Atlantic in Greensboro and DPI to get their feedback as well. I have compiled suggestions from both of them here.



**DPI Message # 608 - Included here
for convenience.**

**DPI Message # 608 Oil Analysis Reminder From Craig
Warren on 10/2/2012.**

Transportation Services reviews oil analysis reports daily from 3 major labs to identify the types of issues discovered in the NC School Bus and Service Vehicle Fleet. This is a great time at another change of the seasons to remind all LEA's to pay closer attention to the oil analysis reports your LEA receives from the labs. The major items still being seen are fuel dilution issues, coolant related issues and silicone levels being elevated that can increase repair costs if the items are not handled quickly. If you have questions understanding your analysis report don't hesitate to ask questions in order to keep the state fleet operating as efficiently as possible.



Here is information for your Thomas Built Buses with Cummins Engines as compiled from Cummins Atlantic, Greensboro and DPI.

- Any customer that gets an oil sample that is questionable should ask questions. Cummins Atlantic has indicated they will be happy to look at the oil sample results and advise us/customer (at no charge) if we need to get the bus in to a shop, before the bus is transported, or before exploratory work is performed. Exploratory work is not warrantable if nothing is found wrong with the engine so you need to be aware and be careful.
- Cummins indicates that in most cases, metal alone will be a watch and wait situations as oil samples are compared as time progresses to determine exactly what is going on. Again, the oil sample results can be looked at by Cummins (at no charge) and an additional sample may be requested if there is a concern before the bus is moved or you incur expense from exploratory engine work.



Here is information for your Thomas Built Buses with Cummins Engines.

- Fuel dilution or traces of coolant indicate a need for repair.
- Sodium and Potassium levels can indicate coolant is getting into the oil.
- Silicate can indicate that there is an air intake issue and this must be addressed immediately.
- Lead and copper indicate wear items that would fall into the metal category mentioned previously.
- Check engine light on requires immediate attention.



Here is information for your Thomas Built Buses with Cummins Engines.

- A good practice is to have oil analysis companies calibrate their equipment once in a while with a clean sample of new engine oil used in your fleet. We are told that this can establish a good baseline to work from. DPI indicates that they will suggest to LEA's that a bulk sample sent to their lab is a must to insure their oil provider is delivering the proper grade of oil and the lab is calibrated to the oil they are testing
- Always error on the side of caution and compare trends in each bus's sample. If you get a sample that indicates something is going on we can enlist help from Cummins to look at it and provide free advice before the unit is moved.



In closing...

Always error on the side of caution.

Keep complete records on each bus.

Call if we can help you have a sample looked at again prior to moving the bus and/or incurring expense for exploratory work.

