RV FLUID ANALYSIS

BLOOD TESTS FOR YOUR RV: How Complete Fluid Analysis Significantly Reduces Your Risk of Purchasing the Seller's Engine, Transmission or Generator Problems

JG Lubricant Services (JGLS) provides oil and coolant testing and analysis on fluid samples pulled during NRVIA[1] certified RV inspections.

The NRVIA fluid sampling and analysis program includes review of the condition of the engine oil, automatic transmission fluid, generator oil and engine coolants *(both main engine and generator engine)*, as applicable. NRVIA certified Level II RV inspectors are specifically trained to drawn samples from these chassis' installed powertrain and power generation components.

JG Lubricant Services periodically reviews NRVIA fluid sample data and provides us with a summary of what the inspections show. The table below shows the most recent summary of results. The data represent samples drawn over the past 3 years and are summarized by Component Type and show the percentage of tests that come back as either **ABNORMA**L or **CRITICAL.** As shown in the table, we have found that a significant number of sampled RV components show alarming levels of Abnormal or Critical test results. These systems would not be considered "road ready" due to the need for either preventative maintenance, further diagnostics or possible repair.

Think of it this way … fluid analysis gives us the ability to "look inside" these complex and expensive driveline and power generation components. Just pulling the dipstick to check for fluid is not enough. Fluid sampling and analysis permits the next level of inspection. There's just no other way to get this kind of information before you purchase your RV, except through fluid sampling and analysis from your certified NRVIA inspector report. Most abnormal reports indicate something to be monitored or perhaps only the need to change the oil or coolant. These items can often be negotiated into the deal just as in a home inspection. Critical reports, on the other hand, show a more immediate need for attention as they may indicate either internal part wear or more serious fluid contamination issues.

Complete fluid analysis has proven to be a real eye opener to buyers as it reveals the true condition of these expensive driveline and power generation components. On more than a few occasions, fluid analysis results have been the deciding factor in proceeding with the purchase. Fluid analysis provides protection against the chance that you might inherit someone else's engine, transmission or generator problem. It could mean the difference between your having peace of mind and having to continually worry whether you might experience costly powertrain or generator repairs down the road. Just as with Home Inspections, the RV inspection should cover all major items including fluids. That is why NRVIA inspectors recommend complete fluid analysis.

As you can see from the tabulated data, it turns out there's a good chance that fluid sampling and analysis may find at least one maintenance deficiency issue. Finding one critical issue will alone pay for the complete fluid analysis. Better to find issues with these complex and expensive systems during the pre-purchase inspection. Again, adding complete fluid analyses significantly reduces the risk of unknowingly purchasing engine, transmission, generator or cooling system problems. The NRVIA strongly recommends having the complete series of fluid samples drawn during your pre-purchase inspection. If any of your test reports indicate issues, you'll have the chance to work with the seller to get them taken care of as part of the deal. Fluid sampling and analysis will reduce risks and give you peace of mind. **Fluid analysis test reports are included with your RV inspection report.**

JG Lubricant Services has been involved in fluid testing since 2010 and has analyzed samples from hundreds of different motorized RVs. The table below shows what we've found just over the past three years. The data include samples from many different manufacturers and types (A, B and C) and clearly demonstrates the effectiveness of sampling RV systems while highlighting the importance of offering this new service to RV and tow vehicle owners.

COMPONENT/SYSTEM	No. samples (n)	% NORMAL	% ABNORMAL	% CRITICAL
Diesel Engine Oil	2605	74	23	3
Unleaded Gasoline Engines	1065	39	53	8
Automatic Transmissions	1803	73	25	2
Cooling Systems	2961	28	52	15

ABNOMAL indicates maintenance issues related to diminished oil or coolant properties where a simple oil and filter or coolant change should alleviate the problem.

CRITICAL indicates more immediate problems related to contamination and/or component wear. These issues may require immediate maintenance and/or repair.

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[1] **NRVIA = National RV Inspectors Association (www.nrvia.org)**