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NEWS

Signature Series Battles Sludge

The health of your engine depends on motor oil circulating quickly and efficiently through the system, but sticking components and...



October 3, 2018



can restrict the flow of oil to the point of engine failure and costly repairs.

Sludge: Where It Starts & How It Ends

- The valve cover and oil pan are generally the first areas sludge appears.
- The oil pick-up tube screen is often the next spot it accumulates, impeding oil flow through the system.
- What begins as a thin film of lacquer or varnish deposits eventually bakes into an expensive mess.

The Sequence VG Engine Test

Engine failures due to sludge are often caused by a clogged pick-up tube screen – the motor is effectively starved of oil. The Sequence VG Engine Test determines how well an oil resists sludge formation and keeps the lubricant flowing freely throughout the system. The test is required for API SN PLUS – a specification recommended by most domestic vehicle manufacturers.

TEST PARAMETERS

Engine	Ford* 4.6L V-8
Duration	216 hours
Measures	Sludge and varnish deposits, piston ring sticking, clogged oil pump screens and roller pin wear
Simulates	Taxi, delivery or commuter vehicle service
Requirement	Oil pick-up tube screen limited to 10% blockage

The Results

Signature Series Synthetic Motor Oil was subjected to the Sequence VG to measure its ability to prevent sludge. As expected, Signature Series produced an oil pick-up tube screen virtually free from sludge (see image). Our unique combination of detergents and high-quality base oils control oxidation and sludge to keep engines clean and efficient.

Signature Series has **50% more detergents**¹ to help keep oil passages clean and promote oil circulation. It provides **90% better protection** against sludge².

¹ vs. AMSOIL OE Motor Oil ² Based on independent testing of AMSOIL Signature Series 5W-30 in the ASTM D6593 engine test for oil screen plugging as required for the API SN PLUS specification. All products advertised here are developed by AMSOIL for use in the applications shown.

Recommended AMSOIL products

Start with [AMSOIL synthetic motor oil](#) and find the exact AMSOIL products for all your vehicles with the [AMSOIL Product Guide](#).

Related Reading

- [How Engine Sludge Forms. And How to Prevent It.](#)



- The Importance of Antioxidants in Marine Oil
- Synthetic Lubricants Resist Sludge Better than Conventional Oils

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What Does Oil Viscosity Mean

Oil viscosity is the measure of its resistance to flow. How quickly or slowly motor oil flows affects how well it protects your engine.

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