# From the President's Desk

You will see in this issue of your Magazine the results of a Sequence IIIG Engine Test an independent lab ran on our Signature Series 5W-30 Motor Oil. The Sequence IIIG is an ASTM test using a 3.8L General Motors V6 engine operating at 125 hp and 3,600 rpm. The test is designed to measure oil thickening, piston deposits, oil consumption and engine wear. It's an industry-standard test that must be passed to meet the API SN and ILSAC GF-5 motor oil specifications. There was nothing standard, however, about what we did. We instructed the lab to double the test duration from 100 to 200 hours. In typical AMSOIL fashion, we attempted to push our oil to the absolute breaking point. We never got there.

Even after 200 hours of operation the oil held up incredibly well. It did its job with room to spare. Wear protection on the cam lobes and lifters was 70 percent better than the allowable standard. The pistons were 85 percent cleaner than the standard, and oil thickening remained 72 percent below the maximum threshold. It was proof once again that our Signature Series oil offers exceptional protection against harmful deposits, viscosity increase and wear in the most demanding operating conditions.

I am not aware of a single company that tests its lubricants as aggressively as we do. Beyond the testing conducted at independent facilities. our in-house mechanical lab runs full-throttle. Three 480-square-foot dynamometer cells, each capable of housing two dynos each, test lubricants across a full range of applications. Our in-house testing gives us the flexibility to modify parameters and focus in on specific properties of oil. We conduct tests that other companies would never conceive of conducting. In short, we go the extra mile.

But testing is just part of the equation. Every product we introduce has

been analyzed across a full range of variables. Decision-makers from all areas of the company meet formally on a regular basis to discuss and debate the merits of any particular product. This group includes members from a cross-section of departments. including, among others, technical development, marketing, sales and finance. Consideration is first given to the performance of the product. If developed, will it meet AMSOIL standards? Will it meet the benchmark our consumers have come to expect from us?

We also determine the potential demand. We identify the target market and establish sales projections. It may be that the product carries broad appeal and will move the needle substantially, or it may be that it will simply fill a niche but meet an important need. In many cases the product is developed to satisfy the demands created by new technology or specific specification requirements. Our mission is always to keep our Dealers well-armed.

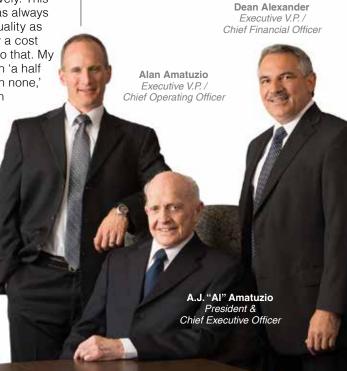
Every effort is made to ensure the product is priced competitively. This can be difficult. AMSOIL has always formulated products with quality as the target. We don't identify a cost limit and restrict ourselves to that. My philosophy has always been 'a half a loaf of bread is better than none,' so we never get greedy with our profit margins. We have to keep our Dealers in the game.

Discussion is also given to marketing. We analyze the market and develop those messages that would best resonate. We then determine which venues would most effectively carry the message. Beyond the communication to our Dealers, it may

be that we target the most relevant magazines; create video or television ads; initiate a social media push; formulate a plan for racing or event sponsorship promotions; or develop sales brochures, technical studies and point-of-purchase materials.

Finally, it is imperative that the potential is there for our Dealers to have success with the product. Will our Dealers be able to sell it? That's the bottom line, and that's where you come in. It's at this point that the opportunity belongs to you.

A.J. "Al" Amatuzio President and CEO, AMSOIL INC.



# AMSOIL SIGNATURE SERIES SYNTHETIC MOTOR OIL EXCELS IN DOUBLE-LENGTH PERFORMANCE TEST

Signature Series once again raises the bar for motor oil performance.

The Sequence IIIG Engine Test (ASTM D7320) is designed to evaluate automotive motor oils for oil thickening, piston deposits, oil consumption and engine wear during moderately high-speed, high-temperature service. It must be passed for motor oil to meet the API SN and ILSAC GF-5 motor oil specifications. Results in the 100-hour test are an important indicator of how well a motor oil will perform in real-world service.

### **Double-Length Test**

Because Signature Series has historically performed well in the test, AMSOIL decided to push the envelope and subject the oil to a double-length (200-hour) Sequence IIIG Engine Test. Signature Series 5W-30 Synthetic Motor Oil not only passed the double-length test, it did so with flying colors. Results show the oil delivered outstanding wear protection,

deposit control and oxidative stability after 200 hours of testing. AMSOIL is not aware of another motor oil that has passed a double-length Sequence IIIG Engine Test. The complete results are available in the new Sequence IIIG Technical Study (G3320).

### What it Means to Motorists

Modern engines demand increased performance from motor oil. Turbochargers, direct fuel injection, variable valve timing and other advancements improve fuel economy and performance, but result in increased operating temperatures, pressures and contaminants, while increasing the likelihood of viscosity loss due to mechanical shear. Motor oil today must guard against the negative effects of added stress for today's sensitive engine systems to function as designed.



While not all motor oils may be up to the challenge, these test results prove that Signature Series offers exceptional protection against harmful deposits, viscosity increase and wear in the toughest conditions, helping motorists maximize the performance and longevity of their vehicles. Its ability to keep components clean despite increased stress helps sophisticated engine systems operate smoothly and demonstrate long life. Signature Series' outstanding performance combined with its extended-drain capabilities offer a unique combination of quality and value not offered by other motor oils.

### Cam & Lifters After Double-Length Sequence IIIG Engine Test

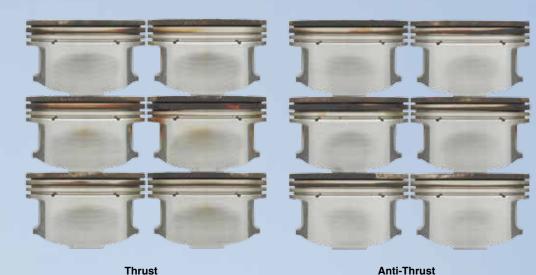
### **Results**

The camshaft and lifter wear values provide a measure of the anti-wear quality of the oil under conditions of high-pressure mechanical contact. Even after 200 hours of testing, Signature Series Synthetic Motor Oil limited wear well below the maximum allowable, providing excellent wear protection.



	API SN/ILSAC GF-5 Requirement after 100 Hours	AMSOIL Signature Series after 100 Hours	AMSOIL Signature Series after 200 Hours
Average Cam plus Lifter Wear (microns)	60 (maximum)	14.8	17.6

### Pistons After Double-Length (200-Hour) Sequence IIIG Engine Test



	API SN/ILSAC GF-5 Requirement after 100 Hours	AMSOIL Signature Series after 100 Hours	AMSOIL Signature Series after 200 Hours
Average Piston Deposits (ratings)	4.0 (Minimum)	7.70	7.42

# Result after 100 Hours using Competitor's Motor Oil for Comparison Thrust Anti-Thrust

**Example of Failing** 

### **Results**

A rating of 5.5 for piston deposits after 100 hours of testing is commonly considered outstanding, while motor oils must earn a minimum 4.0 rating to meet the API SN/ILSAC GF-5 motor oil specification. Even after 200 hours of testing, Signature Series limited deposits and earned ratings well

above the minimum threshold. An example of a piston lubricated with a competitor's oil that failed a normal-length Sequence IIIG Engine Test is included for comparison. Signature Series demonstrated excellent thermal stability and cleanliness properties, easily passing the double-length test. ■



## Sequence IIIG Technical Study

**Stock# Qty. U.S. Can.** G3320 1 1.05 1.30

