Blue Marble: Fact or Friction?

Exploring the truth about Blue Marble Oil

BY RYAN HARRIS

We're not much for smoke and mirrors here. We've heard more claims about the greatest thing to ever hit snowmobiling than we care to remember. Most seem to self-expire once the public has a chance to speak with their wallets.

Several years ago, Blue Marble Oil was the self-proclaimed next big thing. More horsepower, less smoke, reduced friction...The list goes on.

Big deal, we thought. It's oil. Everybody has an oil that does something special. Besides, how do you believe someone who says switching oil gave them more horsepower? Anything under about 10 hp increase is pretty much un-noticeable from seat-of-the-pants testing. Someone could have just as much success claiming that new spark plugs boosted their sled's hp.

But the Blue Marble excitement never went away. We receive emails, mostly forwarded from Enviro Fuels' Jeff Waugh, of consumers praising the benefits of Blue Marble Oil.

One consumer had dynoed the sled before and after the switch, and claimed that without changing anything but the Blue Marble Oil, the dyno showed a 4 hp gain. And the engine's compression had improved by 5 percent.

It sounded like a late-night-TV testimonial for diet pills.

REAL-WORLD EXPERIENCE

So we contacted Alan Williams of Boulder Mountain Sled Shed in British Columbia. Williams has extensive experience with snowmobile engines, and has used all types of oils. Last season, Williams ran Blue Marble for more than 2,000 miles. He ran it in a 2004 Polaris 800 RMK. The only mods he had done to it were a Starting Line pipe and a can that Williams builds (called "The Thing").

Williams ran Polaris' VES oil through the break-in period as recommended by Polaris. After that, he switched to Blue Marble to see what the buzz was about. Over the ensuing months, Williams logged 2,000 miles on the RMK.

Then, he tore the engine apart.

"Blue Marble is definitely different from anything I've tested. It does some of the things they talk about," Williams said. "And until I tore the motor down I couldn't really understand why."

He had an interesting experience once the inner workings of the engine were exposed.

"When I first started taking the motor apart I said to myself, there's no oil here. As I got all the way through it, I got to the point where I had the head off and I had all the right hand side mag and stuff off so there's no drag on the pistons and I spun the motor. It was noticeably easier to spin than had the motor had a lot of oil in it. I continued tearing down and looking at it and all the way through it didn't look like there was any oil residue laying anywhere."

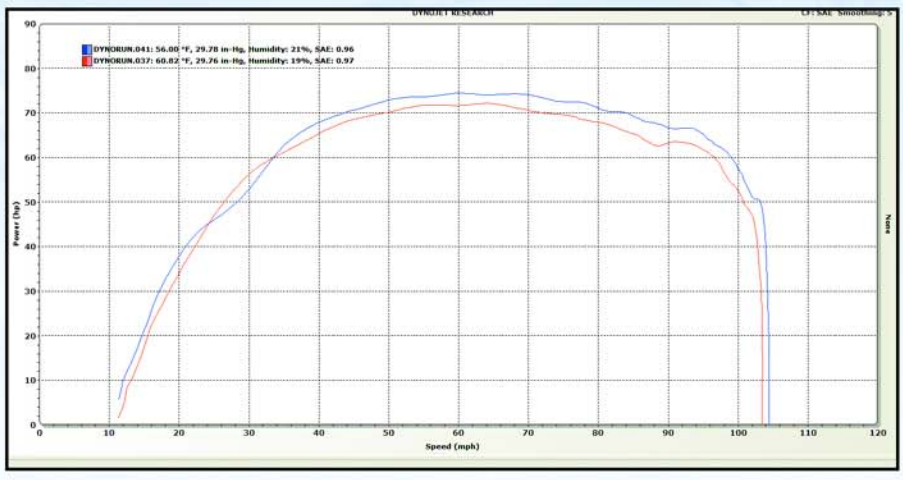
Not the typical thing you'd see in a well-used engine.

"Normally when you take a motor apart there's oil here and there—this didn't have that. I thought that was kind of strange, but as I looked at all the components, there appeared to be no wear on them," Williams said. "There had to be some kind of protection because if there wasn't, there would definitely be some serious wear. Especially since I put 2,000 miles on it."

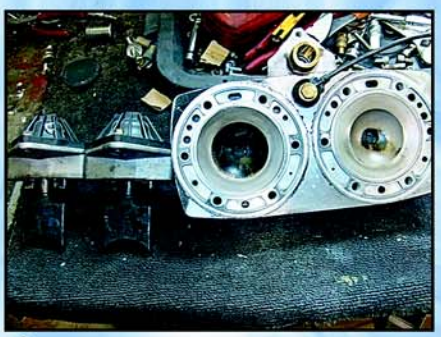
Maybe now is a good time to mention just what it is that Blue Marble is all about. According to Blue Marble, the oil is supposed to change the crystal structure of the engine's metal parts (only the very most outer surface, anyway). This reduces the friction between dry metals. Reduced friction in the engine is going to lead to more power and reduced fuel consumption. Simply put, Blue Marble takes a porous surface (steel, metal) and changes the structural makeup to make the surface more like ceramic or porcelain—non-porous.

What does this change look like? Let's get back to Williams and his 800:

"I started looking closer at the parts and as I got out into the light with a magnifying glass, looking at some of the components, like the wrist pins and any steel that you could actually pull out, you could see a funny-looking color—kind of a rosy hue like there was a pure layer on the metal."



In his own dyno runs, Williams' sled that ran Blue Marble showed a 2-hp gain over a stock 800 twin.



The parts that came out of Williams' test sled showed no traces of oil residue. They also showed no traces of wear for an engine with 2,000 miles on it.

Interested to compare this odd hue to a part that wasn't exposed to Blue Marble, Williams grabbed a few parts from other machines and held them up next to the 800's guts. He says there was a definite difference in the surface appearance between the two metals. Williams attributes the rosy hue, and the complete lack of wear, to the oil.

"It's got to do something because I've got no amount of wear in that motor at all," he said.

Okay, we'll chalk one up for reduced engine wear. And, as Williams concedes, reduced friction will account for more power, albeit negligible.

In his own private dyno tests, Williams' 800 RMK with Blue Marble showed an average of 2 hp more than the baseline for Liberty 800 twins. The marginal gain could be directly related to using Blue Marble, but, like we said earlier, a lot of variables can fudge the numbers 1-3 hp.

But Williams is willing to give the oil the benefit of the doubt.

"After I tore the motor apart a lot of things made sense to me," he said. "If you're able to get away with an oil that leaves a much thinner film of oil in the motor but still offers the protection, then the motor will turn faster internally because it doesn't have the friction or drag. That's the only place I can see they're getting gains which would translate into horsepower. You drop the friction and it's going to spin faster."

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Blue Marble Oil has a patent on technologies that reduce metal to metal friction.

MPG

Horsepower aside, Williams was impressed with the gain in fuel economy that he can only attribute to Blue Marble.

He said he and his testing/riding partners ride pretty much the same route each time they go out. They always log 50 miles to a ride, give or take a few miles. After running about one gallon of Blue Marble through his 800 RMK, Williams began to notice a difference at the pumps. It cost him $6 less to fill his sled after a 50 mile ride than it used to.

His riding buddy switched over to Blue Marble and noticed similar changes in fuel consumption after about a gallon had run through the engine.

"The one thing that really stands out, in my experience, is the fuel mileage," Williams said. "We improved on it dramatically."

He claims that between the two of them riding 50 miles a day, roughly 90 days a year, the improved fuel economy would save them just over $500 each per season in fuel costs. That more than pays for the oil, even if that were the only benefit of switching.

"It added up to a lot of money savings for us, if in fact the oil was the cause of it," said Williams.

So does Blue Marble live up to its claim? Maybe so. Williams at least plans on running it another year.

"I'm going to put the engine back together and run it again this season with a little more horsepower in it and see what it looks like then."

In this independent test, Blue Marble seemed to back up most of its bold claims.

"The one thing it doesn't do is it doesn't stink," Williams added, comparing Blue Marble to some of the other oils he's had experience with.

Okay, so maybe it backs up all of its claims. MSC