

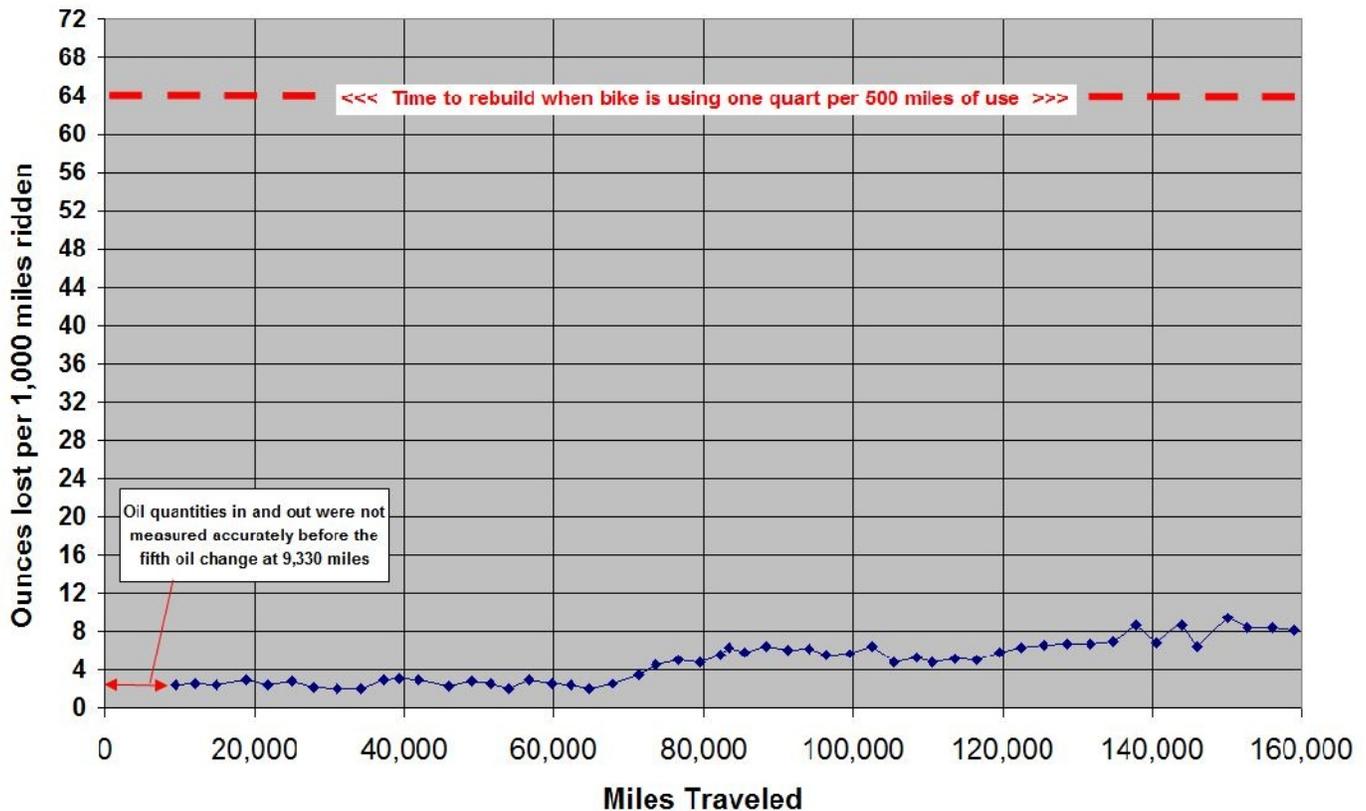
Monitoring the Oil Burn Rate in my 2004 KLR650 with a Thermo-Bob™

(This bike has only seen Mobil 1 car oil: usually 15W-50, but 0W-40 sometimes in the Winter)

A number of KLR650s are known to have an appetite for oil. I believe that the stable temps of the cylinder liner from top to bottom over the years will keep the cylinder round, and thus increase the number of miles before a bike starts burning oil – plus keep the oil cleaner with less contaminants sneaking by the rings... so why not keep track of oil consumption on my 2004, and see how far it goes before it starts drinking?

At the 7,000 mile point during the fourth oil change, I bought a nice measuring cylinder and started physically measuring how many fluid ounces of oil I'd pour *in* at every change, and how many ounces came *out* at each oil change (that first one after the fill was at 9,330 miles). Then I could calculate how many fluid ounces of oil were burned and/or leaked for every 1,000 miles ridden. The next question becomes, "how much is too much?" I've selected 64 ounces per 1,000 miles as the engine rebuild point. I've got a buddy with a '99 KLR that goes through 32 ounces per 1,000 miles, and we never see blue smoke, his bike runs fine, his spark plug doesn't cake up... and I have another buddy with an '87 KLR which averages 64 ounces per 1,000 miles. We *do* see discoloration from his exhaust on his rear fender and occasional smoke. I'm sure some people will draw the line earlier for a rebuild (hey, any excuse to do a 658 / 685 / 688 / 692!) but I want to see the decay with time to see how my bike does. I'll be turning over 160,000 miles later this month, and here are the results to date:

Oil Burn Rate of my 2004 KLR650 with a Thermo-Bob™



Summary:

Even with all these miles, things are still going great! The burn rate used to be around 3 ounces per 1,000 miles and has slowly increased over time, now burning around 8 ounces per 1,000 miles. It is a LONG WAY away from the self-imposed rebuild point. To be fair, these bikes do seem to have much higher oil burn rates when they are ridden above 5,500 rpm, which is not how I ride. So we can't compare these directly to someone who rides at high rpm all the time.

Scatter is expected in this data at such a low burn rate, as it's hard to accurately state the oil consumed down to the ¼ - fluid-ounce at an oil change. So that's why the line hops around a bit. As with all of my testing, I definitely am trying to use the same measuring procedure each time.