

## Report of the Month

Check out this 2009 Ford Focus! Do you see any problems?

To learn more about where the elements are coming from, [click here](#).

UNIT	MAKE/MODEL: Ford 2.0L 4-cyl Duratec	OIL TYPE & GRADE: Mobil 1 High Mileage 5W/20
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 7,863 Miles
	ADDITIONAL INFO:	

COMMENTS	Congrats on getting half a million miles on your Focus. That's pretty darn impressive and the engine is showing no signs of slowing down that we can see. The metals are still low, steady, and properly balanced compared to past samples and universal averages. There is no fuel or coolant contamination to worry about and the air and oil filters had no trouble keeping silicon and insolubles under control. The TBN is 4.9, showing active additive left for a longer run. Try 10,000 miles on the next oil and just keep driving!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	7,863	UNIT / LOCATION AVERAGES	8,200	7,720	5,000			UNIVERSAL AVERAGES
	MI/HR on Unit	500,649		452,280	365,280	350,000			
	Sample Date	1/31/2020		7/29/2019	4/27/2018	3/9/2018			
	Make Up Oil Added			0 qts		0 qts			
	ALUMINUM	2	2	2	1	3			3
	CHROMIUM	0	0	0	0	1			1
	IRON	8	8	7	7	8			9
	COPPER	0	0	0	0	0			3
	LEAD	0	0	1	0	0			0
	TIN	0	0	0	0	0			0
	MOLYBDENUM	70	73	70	78	72			88
	NICKEL	0	0	0	0	0			0
	MANGANESE	0	1	0	2	0			1
	SILVER	0	0	0	0	0			0
	TITANIUM	0	0	0	0	0			2
	POTASSIUM	2	2	2	2	2			1
	BORON	47	55	45	61	66			68
	SILICON	4	23	7	13	67			18
	SODIUM	5	6	7	6	4			25
	CALCIUM	1022	1042	1050	1159	935			1837
	MAGNESIUM	700	703	685	788	639			297
	PHOSPHORUS	653	677	655	739	661			720
	ZINC	727	745	734	837	682			826
	BARIUM	0	0	0	0	0			1

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°	56.7	46-57	56.3	55.7	56.5		
	cSt Viscosity @ 100°C	9.28	6.0-9.7	9.15	8.98	9.20		
	Flashpoint in °F	435	>385	425	440	420		
	Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5		
	Antifreeze %	0.0	0.0	0.0	0.0	0.0		
	Water %	0.0	0.0	0.0	0.0	0.0		
	Insolubles %	0.2	<0.6	0.2	0.3	0.2		
	TBN	4.9	>1.0					
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

This engine is still going strong! We don't limit our extended oil use recommendations to young cars. This sturdy little Ford Focus is still wearing nicely at 500K miles, and since the TBN is strong, metals look good, the filters are functioning well, and no significant contamination is present, we're suggesting the owner go on up to 10,000 miles for the next oil change. We see a fair number of high-mileage engines these days. They don't necessarily require special oil, or anything other than routine maintenance. If yours is getting up there and the doors haven't fallen off, send us a sample to see how the engine looks!