

Report of The Month

This new 2.0L 4-cylinder Kia engine didn't get an oil change for the first 30,000 miles.

What do you think? To learn more about where the elements are from, [click here](#).

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	30,000	UNIVERSAL AVERAGES
	MI/HR on Unit	30,000	
	Sample Date	6/4/2018	
	Make Up Oil Added	0 qts	
ALUMINUM	110	4	
CHROMIUM	3	0	
IRON	299	13	
COPPER	140	2	
LEAD	0	1	
TIN	15	1	
MOLYBDENUM	84	62	
NICKEL	6	0	
MANGANESE	8	0	
SILVER	0	0	
TITANIUM	8	2	
POTASSIUM	9	2	
BORON	4	39	
SILICON	60	12	
SODIUM	304	51	
CALCIUM	1458	1847	
MAGNESIUM	39	143	
PHOSPHORUS	636	666	
ZINC	717	761	
BARIUM	1	0	

PROPERTIES	SUS Viscosity @ 210°F	56.6
	cSt Viscosity @ 100°C	9.23
	Flashpoint in °F	350
	Fuel %	0.8
	Antifreeze %	0.0
	Water %	0.0
	Insolubles %	0.5
	TBN	
	TAN	
	ISO Code	

You know, all in all it's not a terrible report. An earlier oil change would have been good, of course, but mostly what you're looking at is the normal factory wear-in plus 30,000 miles of metal accumulation. There's probably also additional wear from the oil itself being abrasive, from to collecting so much metal. We suggested a few short oil changes to flush the system. The oil held up well over the long interval, though – the viscosity was still in the 5W/30 range and insolubles (oxidized solids caused by heat, use, and blow-by) read within limits.