



OIL REPORT

LAB NUMBER:
REPORT DATE:
CODE:

UNIT ID:
CLIENT ID:
PAYMENT:

UNIT	MAKE/MODEL:	Mazda 2.5L Inline 4 SkyActiv	OIL TYPE & GRADE:	Valvoline SynPower 0W/20
	FUEL TYPE:	Gasoline (Unleaded)	OIL USE INTERVAL:	7,068 Miles
	ADDITIONAL INFO:	2016.5 CX-5		

CLIENT	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

COMMENTS	Wear trends are a little interesting this time around. You shortened the oil change interval, yet iron more than doubled and you've got a little more aluminum, too. Metals aren't far out of line, but the increase is worth monitoring. If this oil run was harder than usual (e.g. more stop/go, high RPM's) or featured more idling during the colder months, then metals should start to settle down without taking any corrective action. The viscosity was a little low, probably due to the higher amount of fuel, but 1.8% is harmless otherwise. The TBN's fine at 2.3. Check back.

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	7,068	UNIT / LOCATION AVERAGES	8,228	9,455	10,082	9,829	8,951	UNIVERSAL AVERAGES
	MI/HR on Unit	54,782		47,714	39,486	30,031	19,949	10,120	
	Sample Date	3/22/2019		8/24/2018	3/5/2018	7/28/2017	2/3/2017	7/22/2016	
	Make Up Oil Added			0.5 qts	0.5 qts	0.5 qts	0.5 qts	0.2 qts	
	ALUMINUM	6	6	4	6	5	6	6	4
	CHROMIUM	1	1	0	1	0	1	1	0
	IRON	21	18	10	15	17	21	26	11
	COPPER	1	4	1	1	2	5	14	3
	LEAD	0	0	0	0	0	0	0	0
	TIN	0	0	0	0	0	0	0	0
	MOLYBDENUM	2	42	9	16	58	20	147	170
	NICKEL	0	0	0	0	0	0	0	0
	MANGANESE	0	0	0	0	0	0	1	0
	SILVER	0	0	0	0	0	0	0	0
	TITANIUM	1	6	3	4	6	23	0	4
	POTASSIUM	2	2	1	3	5	2	1	3
	BORON	3	31	14	21	41	21	85	94
	SILICON	14	16	15	13	12	14	25	13
	SODIUM	297	198	307	275	61	239	7	28
	CALCIUM	1914	1704	1914	1715	1173	1380	2125	1690
	MAGNESIUM	11	108	18	70	524	12	11	321
	PHOSPHORUS	609	598	567	629	534	518	731	666
	ZINC	670	663	613	654	601	580	857	754
	BARIUM	0	0	0	0	0	0	2	1

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	46.5	46-57	48.7	48.7	50.0	44.4	49.1
	cSt Viscosity @ 100°C	6.20	6.0-9.7	6.88	6.87	7.28	5.55	7.00
	Flashpoint in °F	340	>385	385	360	380	315	385
	Fuel %	1.8	<2.0	TR	1.3	TR	2.5	TR
	Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0	0.0	0.0	0.0
	Insolubles %	0.4	<0.6	0.2	0.2	0.2	0.4	0.2
	TBN	2.3	>1.0	2.8	2.8	3.1	1.8	2.7
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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