



OIL REPORT

LAB NUMBER: P06536 UNIT ID: 01 MIATA
 REPORT DATE: 11/10/2021 CLIENT ID: 166525
 CODE: 20/68 PAYMENT: CC: Visa

UNIT	MAKE/MODEL: Mazda 1.8L 4-cyl	OIL TYPE & GRADE: Total 5W/40
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 500 Miles
	ADDITIONAL INFO: 1993, Rods and main bearings changed before 04/07/21 sample	

CLIENT	JOSH CASTALDI	PHONE: (503) 913-0927
	19076 RUSTY TERR.	FAX:
	OREGON CITY, OR 97045	ALT PHONE:
		EMAIL: joshua.castaldi@gmail.com

COMMENTS JOSH: Now that's more like it! Copper and lead are low this time, so bearing wear isn't a concern based on this data. Other wear metals look good as well, so we're pleased with these results. Silicon is probably from sealers/gaskets/lubes used during the service and it should wash out nicely with each oil change going forward. If it were dirt, we'd find more wear than this, but check the air filter/intake anyway, just in case some of the silicon is dirt. The viscosity is low and in the 5W/20 range or so, and a trace of fuel is harmless. Nice progress at 2,500 total miles!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	500	UNIT / LOCATION AVERAGES	315	500	400	UNIVERSAL AVERAGES
	MI/HR on Unit	2,500		1,500		400	
	Sample Date	10/18/2021		6/13/2021	4/7/2021	8/8/2020	
	Make Up Oil Added	0 qts		0 qts	0 qts	0 qts	
ALUMINUM	4	5	3	5	6	3	
CHROMIUM	1	1	0	1	1	1	
IRON	9	15	12	22	15	9	
COPPER	3	36	13	74	53	4	
LEAD	1	44	12	89	72	2	
TIN	0	4	3	6	7	0	
MOLYBDENUM	67	20	4	7	1	96	
NICKEL	0	1	0	1	2	0	
MANGANESE	1	1	0	1	0	1	
SILVER	1	6	7	15	0	0	
TITANIUM	0	1	1	1	0	2	
POTASSIUM	2	1	1	0	1	2	
BORON	142	52	64	1	1	79	
SILICON	307	135	30	142	59	13	
SODIUM	7	6	5	6	7	34	
CALCIUM	918	990	2330	304	408	1874	
MAGNESIUM	439	118	18	5	10	333	
PHOSPHORUS	602	1406	1028	2053	1940	813	
ZINC	655	1548	1154	2236	2145	940	
BARIUM	0	0	0	0	0	0	

Values Should Be*

PROPERTIES	SUS Viscosity @ 210°F	53.7	65-78	67.4	55.2	54.6
	cSt Viscosity @ 100°C	8.39	11.6-15.3	12.25	8.83	8.65
	Flashpoint in °F	380	>385	425	355	380
	Fuel %	TR	<2.0	<0.5	1.0	TR
	Antifreeze %	0.0	0.0	0.0	0.0	0.0
	Water %	0.0	<0.1	0.0	0.0	0.0
	Insolubles %	0.3	<0.6	0.1	0.4	0.2
	TBN					
	TAN					
	ISO Code					

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com