OIL REPORT

LAB NUMBER: N32755 **UNIT ID:** MIATA
REPORT DATE: 4/20/2021 **CLIENT ID:** 166525
CODE: 20/68 **PAYMENT:** CC: Visa

UNIT

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

CLIENT

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

COMMENTS

JOSH: The bearings were replaced since your last sample so we can blame some of the extra metal on wear-in this time. As the engine sees more oil changes metals will gradually wash out. Silver is probably from soldering material; though sometimes it can show bearing wear (copper, lead and tin are more traditional bearing metals though). Silicon is from sealers and should wash out with each oil change too. The viscosity was low again and the low flashpoint shows 1.0% fuel, which isn't an amount we consider cautionary. Use another short run (500 miles) to flush.

ELEMENTS IN PARTS PER MILLION

MI/HR on Oil	500	UNIT / LOCATION AVERAGES	400					UNIVERSAL AVERAGES	
MI/HR on Unit			400						
Sample Date	4/7/2021		8/8/2020						
Make Up Oil Added	0 qts		0 qts						
ALUMINUM	5	6	6					3	
CHROMIUM	1	1	1					1	
IRON	**22**	19	15					9	
COPPER	**74**	64	**53**					4	
LEAD	**89**	81	**72**					2	
TIN	**6**	7	**7**					0	
MOLYBDENUM	7	4	1					96	
NICKEL	1	2	2					0	
MANGANESE	1	1	0					1	
SILVER	**15**	8	0					0	
TITANIUM	1	1	0					2	
POTASSIUM	0	1	1					2	
BORON	1	1	1					77	
SILICON	**142**	101	**59**					13	
SODIUM	6	7	7					36	
CALCIUM	304	356	408					1909	
MAGNESIUM	5	8	10					316	
PHOSPHORUS	2053	1997	1940					817	
ZINC	2236	2191	2145					944	
BARIUM	0	0	0					0	

PROPERTIES

		Values Should Be*					
SUS Viscosity @ 210°F	**55.2**	65-78	**54.6**				
cSt Viscosity @ 100°C	**8.83**	11.6-15.3	**8.65**				
Flashpoint in °F	**355**	>375	**380**				
Fuel %	1.0	<2.0	TR				
Antifreeze %	0.0	0.0	0.0				
Water %	0.0	<0.1	0.0				
Insolubles %	0.4	<0.6	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