

OIL REPORT

LAB NUMBER: H50020 **REPORT DATE:** 5/11/2016

CODE: 20/685

UNIT ID: 08 R320 CLIENT ID: 87445 PAYMENT: CC: MC

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MAKE/MODEL: Mercedes Benz 3.0L V-6 OM642

OIL TYPE & GRADE: Mobil 1 ESP 5W/30

FUEL TYPE: Diesel

MARC HANNA

OIL USE INTERVAL: 4,200 KM

ADDITIONAL INFO: EGR disabled

PHONE: (226) 240-0774

703 ROBERT FERRIE DR FAX:

KITCHENER, ON N2R 0B2 ALT PHONE:
CANADA EMAIL: marc@hagios.ca

OMMENTS

MARC: This sample has seen about as much use as your first, so that will provide a good comparison for metals. Everything matches up well to that report, so your Mercedes is still putting up steady wear trends. The fuel we found last time cleared up nicely, and the viscosity read within spec for the grade. The TBN means this fill has additive left for a longer run as well. Grab a sample at close to 18,000 km without doing an oil change. We'll expect similar results to your last report, and will let you know if you can safely run longer on the oil then. What a good report!

| | MI/HR on Oil | 4,200 | | 18,000 | 10,000 | 4,500 | | |
|-------------|-------------------|-----------|--------------------|-----------|------------|-----------|--|-----------|
| | MI/HR on Unit | 103,873 | UNIT / LOCATION | 99,627 | 90,680 | 84,000 | | UNIVERSAL |
| | Sample Date | 4/15/2016 | AVERAGES | 2/19/2016 | 10/14/2015 | 9/12/2015 | | AVERAGES |
| | Make Up Oil Added | 0 qts | | 0 qts | 0 qts | 0 qts | | |
| | | | | | | | | |
| N | ALUMINUM | 2 | 3 | 5 | 3 | 2 | | 7 |
| - | CHROMIUM | 0 | 1 | 1 | 1 | 1 | | 1 |
| | IRON | 17 | 22 | 38 | 20 | 14 | | 46 |
| | COPPER | 1 | 2 | 3 | 2 | 1 | | 4 |
| 쯢 | LEAD | 0 | 0 | 1 | 0 | 0 | | 1 |
| Д | TIN | 1 | 1 | 3 | 0 | 0 | | 1 |
| ARTS | MOLYBDENUM | 63 | 19 | 5 | 3 | 3 | | 48 |
| | NICKEL | 0 | 1 | 2 | 0 | 0 | | 1 |
| Ъ | MANGANESE | 0 | 0 | 0 | 0 | 0 | | 1 |
| Z | SILVER | 0 | 0 | 0 | 0 | 0 | | 0 |
| S | TITANIUM | 0 | 0 | 0 | 0 | 0 | | 0 |
| | POTASSIUM | 2 | 3 | 6 | 1 | 3 | | 7 |
| Π | BORON | 222 | 309 | 296 | 364 | 354 | | 68 |
| M | SILICON | 6 | 6 | 7 | 4 | 5 | | 6 |
| H | SODIUM | 2 | 2 | 2 | 3 | 2 | | 5 |
| | CALCIUM | 1737 | 2065 | 1987 | 2378 | 2156 | | 1577 |
| | MAGNESIUM | 16 | 42 | 49 | 54 | 50 | | 258 |
| | PHOSPHORUS | 752 | 843 | 785 | 922 | 911 | | 839 |
| | ZINC | 848 | 1034 | 1039 | 1190 | 1060 | | 988 |
| | BARIUM | 0 | 0 | 0 | 0 | 0 | | 0 |

Values

Should Be*

| SUS Viscosity @ 210°F | 64.3 | 57-65 | 67.1 | 65.9 | 66.5 | |
|-----------------------|-------|----------|-------|-------|-------|---|
| cSt Viscosity @ 100°C | 11.42 | 9.4-11.9 | 12.17 | 11.86 | 12.01 | |
| Flashpoint in °F | 435 | >410 | 400 | 425 | 445 | |
| Fuel % | <0.5 | <2.0 | 1.0 | <0.5 | <0.5 | |
| Antifreeze % | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Water % | 0.0 | <0.1 | 0.0 | 0.0 | 0.0 | |
| Insolubles % | 0.1 | <0.6 | 0.3 | 0.2 | 0.2 | |
| TBN | 5.4 | >1.0 | 4.6 | 6.4 | | |
| 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