Customer Information

[redacted]
[redacted]
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Attention : [redacted]
Phone : [redacted]

Equipment Information

Unit # : **2012 AMG C63**
Component : **ENGINE**
Location :
Unit Mfr/Model :
Unit Serial # :
Comp Mfr/Model : MERCEDES-BENZ / C63
Comp Serial # :

Lubricant

Manufacturer : SHELL
Brand : ROTELLA T6
Grade : 5W40
Sample # : 2020/02/18-600
Lab Tracking # : 3 - 859240

FLUID LIFE
EQUIPMENT RELIABILITY SERVICES

Oil Analysis

95 Copernicus Boulevard, Brantford
Ontario, Canada N3P 1N4
Phone: 877 962 2400

Sample		Contaminants ppm			Wear Metals ppm											Additives ppm							
Sample Number	Sample Date	Sodium	Potassium	Silicon	Aluminium	Iron	Copper	Lead	Tin	Chromium	Nickel	Titanium	Silver	Vanadium	Antimony	Beryllium	Calcium	Zinc	Phosphorus	Magnesium	Molybdenum	Boron	Barium	Lithium
Ref. Sample	2019/03/18	3	1	4	0	1	0	0	0	0	0	1	0	0	1	0	2080	1100	1030	90	0	205	0	1
02/18-600	2020/02/11	2	2	4	2	6	1	2	1	0	0	1	0	0	0	0	2096	1161	1101	201	8	184	0	1
05/23-060	2019/05/05	3	2	5	3	10	2	0	0	0	0	1	0	0	1	0	1700	1130	987	396	21	125	0	0
11/07-240	2017/10/29	3	0	4	2	12	2	3	1	0	0	0	0	0	0	0	973	1170	1056	1022	64	51	0	0
02/15-012	2017/01/31	4	2	6	4	19	4	0	0	1	0	0	0	0	0	0	1374	1114	1018	747	64	59	0	0
11/12-272	2015/11/01	1	4	5	8	22	6	1	2	1	0	0	0	0	0	0	2523	923	881	22	66	98	0	0
04/29-243	2015/04/26	3	11	7	16R	43	11	1	0	1	0	0	0	0	0	0	2390	978	890	37	88	165	0	0

Sample Information

Sample Date	Oil Mfr.	Oil Brand	Oil Grade	Comp. Service	Oil Service	Oil Units	Oil Chg
Ref. Sample	SHE	ROT T6	5W40				
2020/02/11	SHE	ROT T6	5W40	~40727	1082	KM	N
2019/05/05	SHE	ROT T6	5W40	39645	4997	KM	Y
2017/10/29	SHE	ROT T6	5W40	34680	3111	KM	N
2017/01/31	SHE	ROT T6	5W40	31568	4578	KM	Y
2015/11/01	MB	MB 229-5	5W40	26990	3905	KM	N
2015/04/26	MOB	?	0W40	22999	2059	KM	N

Physical Tests

Sample Date	Visc 40°C cSt	Visc 100°C cSt	Visc Index	Water	Glycol	Fuel %	NIT (A/cm)	OX (A/cm)	Sul (A/cm)
Ref. Sample	90.2	14.79	172				<0.10	0.24	<0.10
2020/02/11	84.4	14.00	171	N	NT	NT	6.64	1.35	<0.10
2019/05/05	85.5	14.20	172	N	NT	NT	12.1	2.05	5.52
2017/10/29	74.6	13.00	177	N	NT	NT	11.6	5.05	6.28
2017/01/31	72.1R	12.41R	172	PU	NT	1.04	15.3	6.40	6.93
2015/11/01	77.1	12.65	164	N	NT	<0.60	-	-	-
2015/04/26	68.2R	12.06R	175	PR	NT	2.06R	-	-	-

Results

2020/02/11 Tested wear and contamination levels are within acceptable limits.
Oil analysis results for this sample (as well as the last sample at ~5000 oil km) have been well within acceptable limits for wear and oil condition. This would suggest a 5000km interval for oil changes is acceptable. A longer interval may be possible, but would require more frequent testing at extended oil usage to determine how long the interval could be extended.

2019/05/05 Tested wear and contamination levels are within acceptable limits.

2017/10/29 Tested wear and contamination levels are within acceptable limits.

2017/01/31 Note Water, Viscosity at 40°C and Viscosity at 100°C.

2015/11/01 Tested wear and contamination levels are within acceptable limits.

2015/04/26 Note Fuel, Water, Viscosity at 40°C and Viscosity at 100°C and flagged element Aluminum.

Recommendations

2020/02/11 Resample next interval to monitor.
Notes: SHOULD THE OIL BE CHANGED AT LOW KM, 1 YEAR ?

2019/05/05 Resample next interval to monitor.

2017/10/29 Resample next interval to monitor.

2017/01/31 Water contamination can be detrimental to any component. Check or assess system for source of contamination.
Verify oil type. Make sure oil meets manufacturers specifications.
Resample mid - interval to monitor.

2015/11/01 Resample next interval to monitor.

2015/04/26 Assess all causes of viscosity dilution - fuel leak, excess idling, wrong lube used, sample

Key: Y - Yes N - Negative P - Positive R - Reportable U - Unacceptable S - Severe I - Insufficient Sample > - More Than < - Less Than NT - Not Triggered ▲ - Updated ~ - Lab Estimated