

# Lubricant Inspection Record



**METRO TECH SYSTEMS LTD.**  
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**ISO 9001:2000**  
 Registered Firm

Client  
 Location Calgary  
 Unit Number ENGINE  
 Component  
 Make/Model MB C63  
 Serial #

Lab Number:	PF4598	PH1091	PK2218	QD1615	New Oil
Sample Date:	Jun 01/09	Jul 10/09	Nov 09/09	Apr 09/10	
Unit:	10626 Kms	14067 Kms	21020 Kms	27830 Kms	
Oil:	6740 Kms	3441 Kms	6953 Kms	6810 Kms	
Oil Type:	MOBIL 0W40	MOBIL 5W40	MOBIL 1 5W40	AMSOIL 0W30	AMSOIL 0W30
<b>METALS (D5185): Milligrams per Kilogram (PPM)</b>					
Highlighted Test Results Indicate Abnormal Concentrations					
Tin	2	0	0	0	0
Lead	1	1	1	1	1
Copper	6	5	5	2	0
Aluminum	15	5	6	5	1
Silicon	12	4	6	12	1
Iron	39	18	18	13	2
Chromium	2	0.7	0.8	1	0
Silver	0	0	0	0	0
Zinc	1050	917	1000	810	702
Magnesium	46	21	8	2	12
Nickel	0	0	0	0	0
Barium	0	0	0	0	0
Sodium	1	4	11	1	1
Calcium	2000+	1950	1900	2000+	3400
Vanadium	0	0	0	0	0
Phosphorus	900	805	858	726	657
Molybdenum	92	82	87	27	2
Boron	154	115	113	32	10
Manganese	3	10	5	2	0
<b>PHYSICAL PROPERTIES</b>					
Viscosity (D445) @ 40°C					
Viscosity (D445) @ 100°C	<b>12.24</b>	<b>12.16</b>	<b>11.96</b>	11.74	10.43
Water (D4007) (% v/v)	0	0	0	0	0
Solids (D4007) (% v/v)	<0.1	<0.1	<0.1	0	0
Glycol	No	No	No	No	No
Fuel Dilution	<b>YES</b>	<b>YES</b>	<b>YES</b>	No	
<b>OTHER PROPERTIES</b>					
Acid No. (D664)					
Base No. (D2896)				7.56	12.87
Base No. (D4739)					
Oxidation					
Nitro Compounds					
Organic Nitrates					
Particle Count (ISO 4406)					
Oil Changed?	YES	YES	YES	YES	
<b>COMMENTS</b> <b>RATING SYSTEM: A is LOW B is LOW to MODERATE C is MODERATE D is HIGH E is SEVERE</b>					
PF4598 - Tests indicate the need to CHANGE OIL & FILTER. Dust/Dirt (A). Aluminum wear (B). Cylinders; pistons; rings wear (A). ** Resample in 3000 KM **					
PH1091 - Tests indicate the need to CHANGE OIL & FILTER. Maintain routine sampling.					
PK2218 - Tests indicate the need to CHANGE OIL & FILTER. Maintain routine sampling.					
QD1615 - Tests DO NOT indicate an immediate need for an oil change These tests do not indicate any current problems. Maintain routine sampling.					
Laboratory Telephone (403) 295-8803      Results were verified on Apr 09/10      by F Saiaid Shirabad      112257 01					