MOB LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
901066
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Please note that all wear metal and contaminant levels are being considered accumulative. We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes BN to determine the suitability of the oil for continued use.

WEAR

All component wear rates are normal.

CONTAMINATION

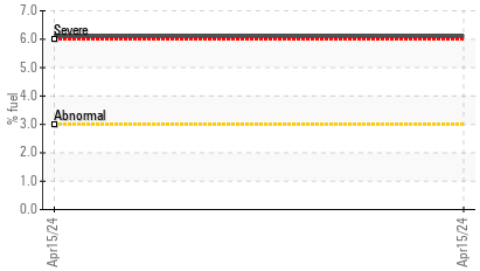
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

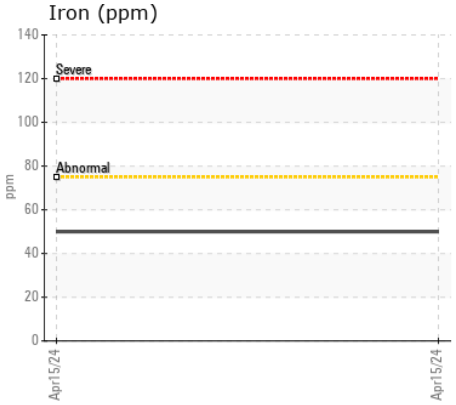
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0089846	---	---
Sample Date		Client Info		15 Apr 2024	---	---
Machine Age	hrs	Client Info		18958	---	---
Oil Age	hrs	Client Info		1015	---	---
Filter Age	hrs	Client Info		1015	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>75	50	---	---
Chromium	ppm	ASTM D5185(m)	>5	1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)	>2	<1	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>15	4	---	---
Lead	ppm	ASTM D5185(m)	>25	3	---	---
Copper	ppm	ASTM D5185(m)	>100	125	---	---
Tin	ppm	ASTM D5185(m)	>4	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	12	---	---
Potassium	ppm	ASTM D5185(m)	>20	8	---	---
Fuel	%	ASTM D7593*	>3.0	▲ 6.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>6	0.6	---	---
Nitration	Abs/cm	ASTM D7624*	>20	11.5	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.4	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)		7	---	---
Boron	ppm	ASTM D5185(m)	0	14	---	---
Barium	ppm	ASTM D5185(m)	0	3	---	---
Molybdenum	ppm	ASTM D5185(m)	60	26	---	---
Manganese	ppm	ASTM D5185(m)	0	3	---	---
Magnesium	ppm	ASTM D5185(m)	1010	741	---	---
Calcium	ppm	ASTM D5185(m)	1070	1107	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	733	---	---
Zinc	ppm	ASTM D5185(m)	1270	892	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2105	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	24.0	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	▲ 80.4	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ 11.8	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	142	140	---	---

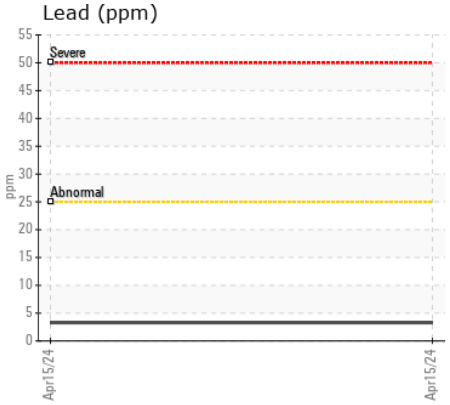
Fuel Dilution



Iron (ppm)

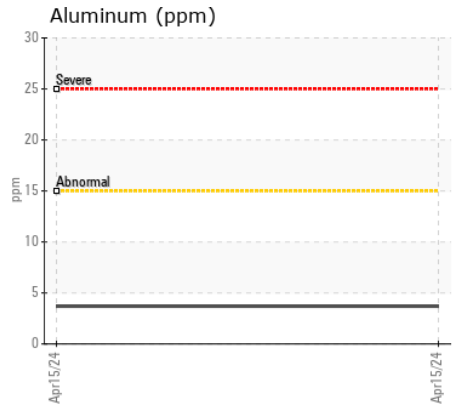


Lead (ppm)

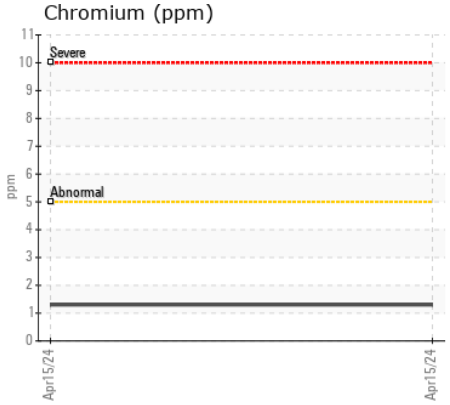


Viscosity @ 100°C

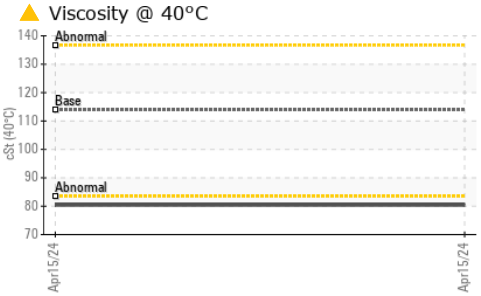
Aluminum (ppm)



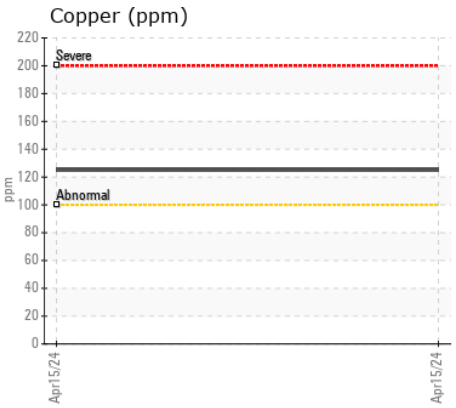
Chromium (ppm)



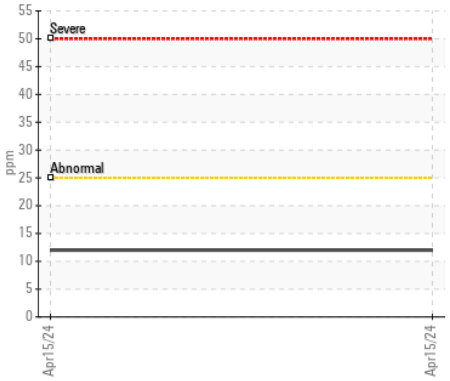
Viscosity @ 40°C



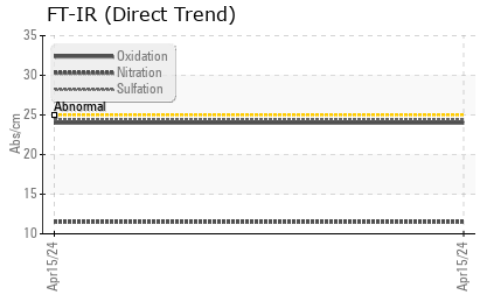
Copper (ppm)



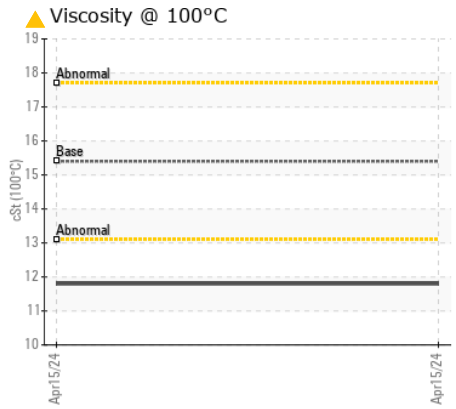
Silicon (ppm)



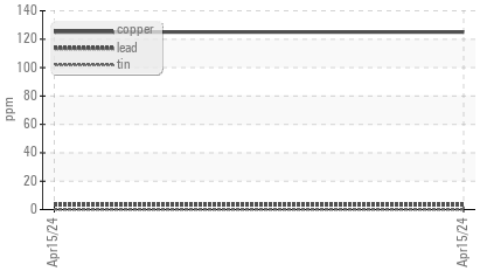
FT-IR (Direct Trend)



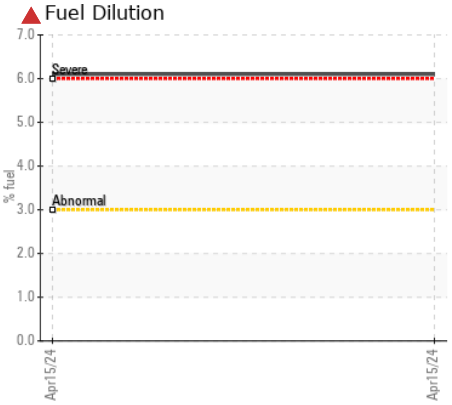
Viscosity @ 100°C



Non-ferrous Metals



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0089846
Lab Number : 02644786
Unique Number : 5802325
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, VI, Visual)

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Kevin Marson

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

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