MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
INTERNATIONAL 829108
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA DURON HP 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

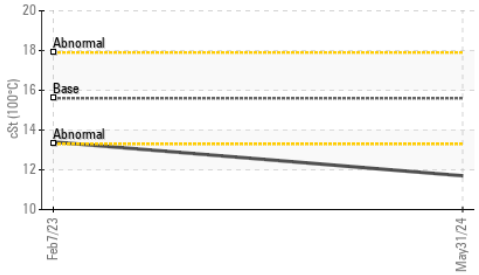
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

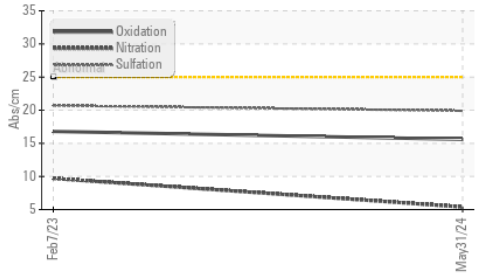
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122261	GFL0071117	---
Sample Date		Client Info		31 May 2024	07 Feb 2023	---
Machine Age	hrs	Client Info		8520	68800	---
Oil Age	hrs	Client Info		502	0	---
Filter Age	hrs	Client Info		502	0	---
Oil Changed		Client Info		Changed	N/A	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ABNORMAL	NORMAL	---
Iron	ppm	ASTM D5185(m)	>100	9	25	---
Chromium	ppm	ASTM D5185(m)	>20	0	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	4	23	---
Lead	ppm	ASTM D5185(m)	>40	0	0	---
Copper	ppm	ASTM D5185(m)	>330	17	<1	---
Tin	ppm	ASTM D5185(m)	>15	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	5	5	---
Potassium	ppm	ASTM D5185(m)	>20	9	30	---
Fuel	%	ASTM D7593*	>2.0	0.1	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0	0	---
Nitration	Abs/cm	ASTM D7624*	>20	5.4	9.7	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	20.7	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185(m)		2	2	---
Boron	ppm	ASTM D5185(m)	0	157	3	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	60	10	61	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	1010	87	981	---
Calcium	ppm	ASTM D5185(m)	1070	1990	1114	---
Phosphorus	ppm	ASTM D5185(m)	1150	935	1125	---
Zinc	ppm	ASTM D5185(m)	1270	1067	1231	---
Sulfur	ppm	ASTM D5185(m)	2060	2829	2653	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.6	16.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	▲ 11.7	13.4	---

Viscosity @ 100°C

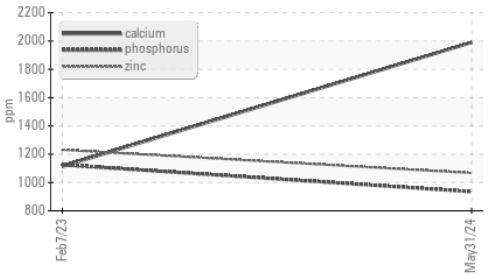


Fuel Dilution

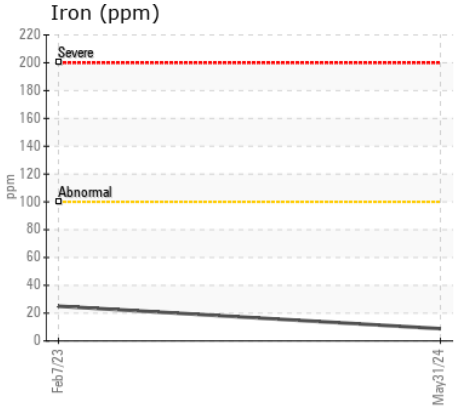
FT-IR (Direct Trend)



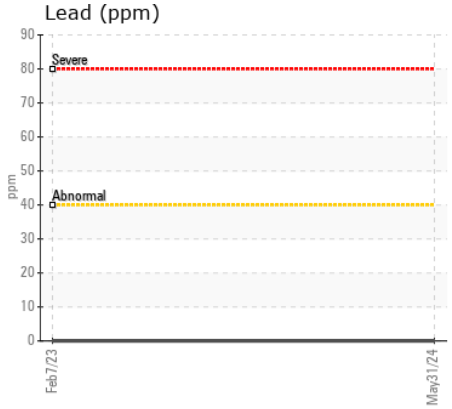
Additives



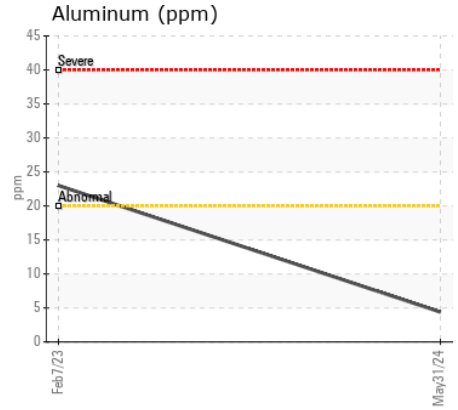
Iron (ppm)



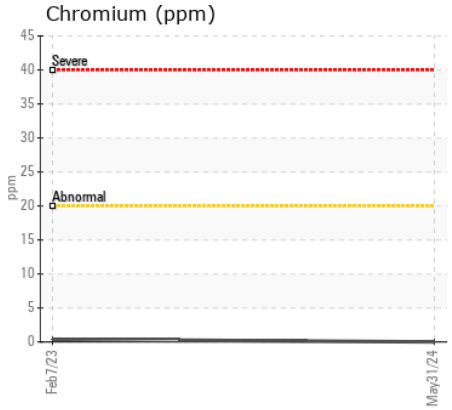
Lead (ppm)



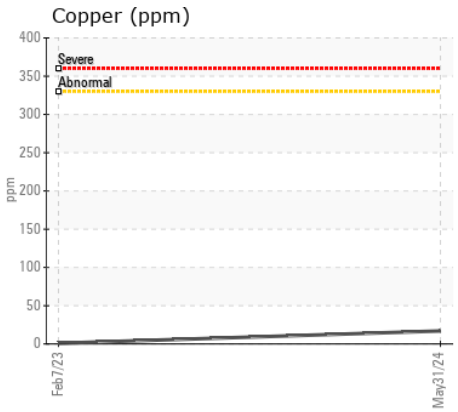
Aluminum (ppm)



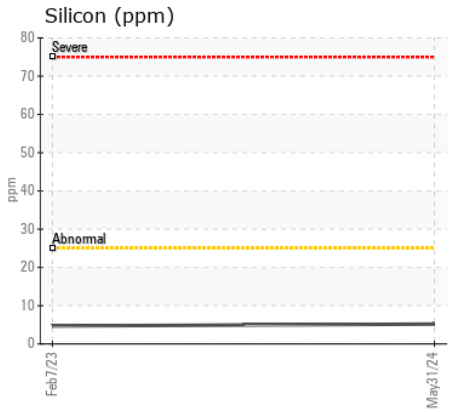
Chromium (ppm)



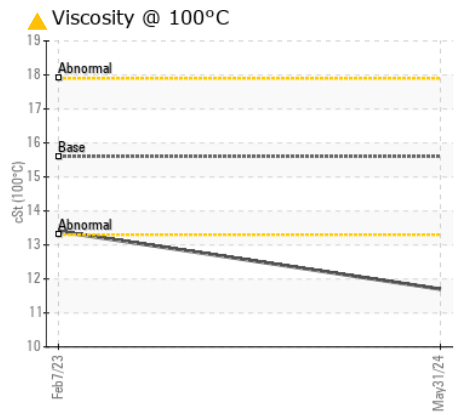
Copper (ppm)



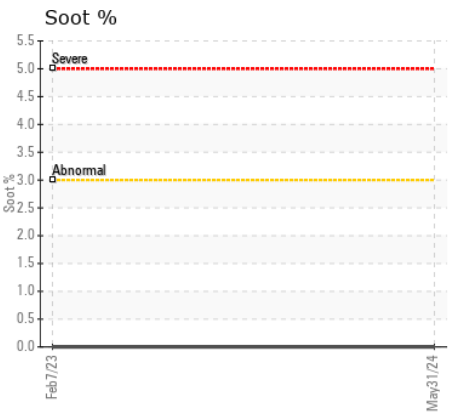
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122261
Lab Number : 02640177
Unique Number : 5789339
Test Package : MOB 1 (Additional Tests: BottomAnalysis, FILTERPATCH, FuelDilution, PercentFuel, Visc@100)

Received : 06 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 10 Jun 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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