MOB II LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
NO UNIT GFL0112430
Component
Diesel Engine
Fluid
PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

WEAR

Metal levels are typical for a components first oil change.

CONTAMINATION

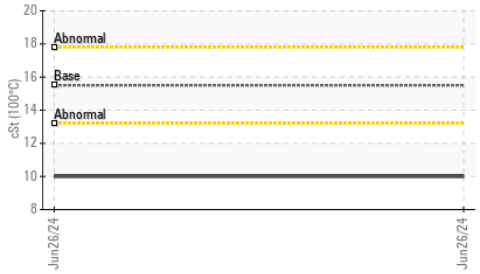
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the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

FLUID CONDITION

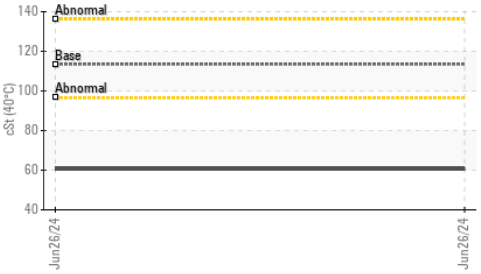
The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 5W30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112430	---	---
Sample Date		Client Info		26 Jun 2024	---	---
Machine Age	hrs	Client Info		723	---	---
Oil Age	hrs	Client Info		723	---	---
Filter Age	hrs	Client Info		723	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>120	48	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>5	7	---	---
Titanium	ppm	ASTM D5185(m)	>2	<1	---	---
Silver	ppm	ASTM D5185(m)	>2	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	7	---	---
Lead	ppm	ASTM D5185(m)	>40	5	---	---
Copper	ppm	ASTM D5185(m)	>330	175	---	---
Tin	ppm	ASTM D5185(m)	>15	3	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	69	---	---
Potassium	ppm	ASTM D5185(m)	>20	19	---	---
Fuel	%	ASTM D7593*	>3.0	0.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>4	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	9.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.0	---	---
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)		5	---	---
Boron	ppm	ASTM D5185(m)	1	230	---	---
Barium	ppm	ASTM D5185(m)	1	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	60	114	---	---
Manganese	ppm	ASTM D5185(m)	1	4	---	---
Magnesium	ppm	ASTM D5185(m)	1010	671	---	---
Calcium	ppm	ASTM D5185(m)	1070	1332	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	683	---	---
Zinc	ppm	ASTM D5185(m)	1270	815	---	---
Sulfur	ppm	ASTM D5185(m)	2060	1926	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.5	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.5	3.74	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	8.07	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	113.5	▲ 60.6	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	▲ 10.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	151	---	---

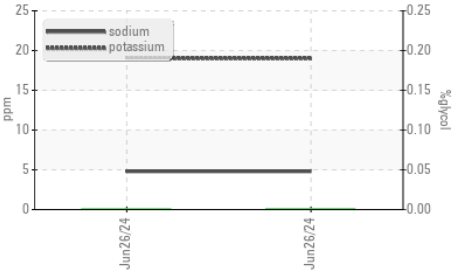
Viscosity @ 100°C



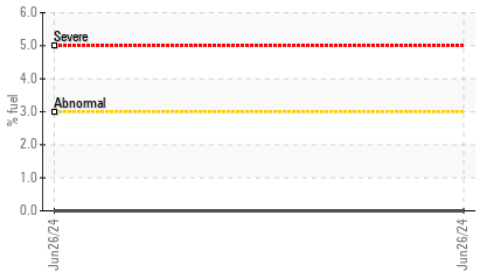
Viscosity @ 40°C



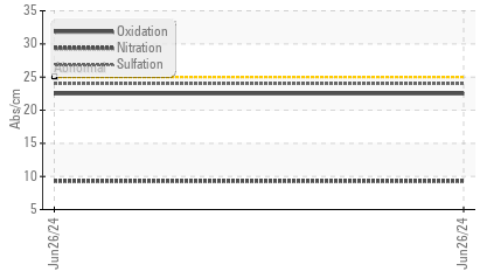
Glycol Contamination



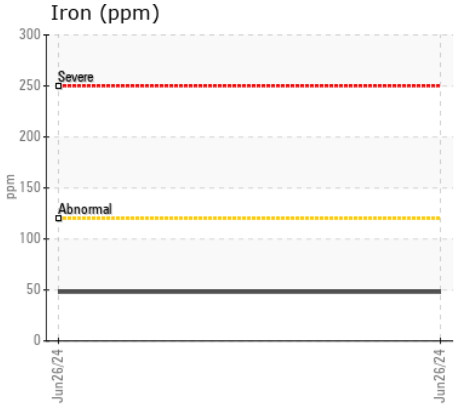
Fuel Dilution



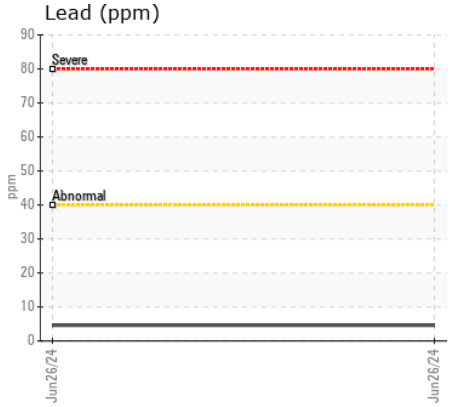
FT-IR (Direct Trend)



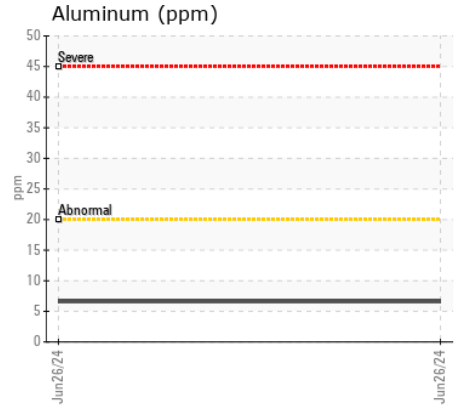
Iron (ppm)



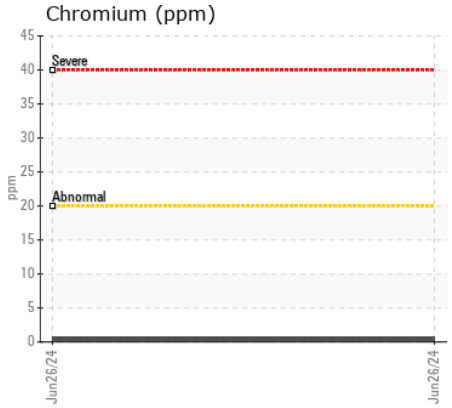
Lead (ppm)



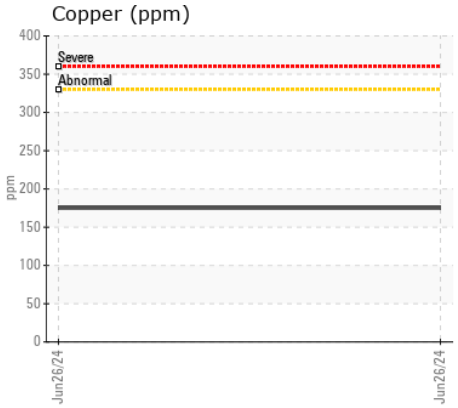
Aluminum (ppm)



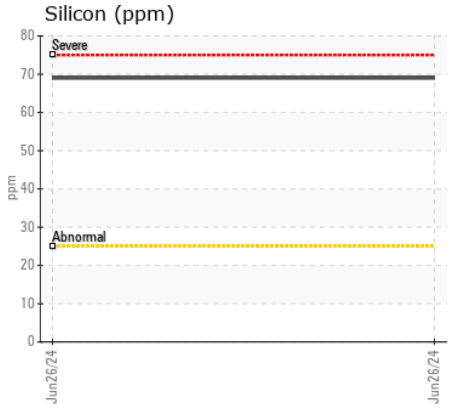
Chromium (ppm)



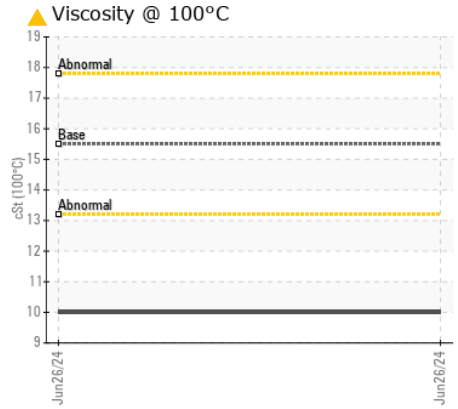
Copper (ppm)



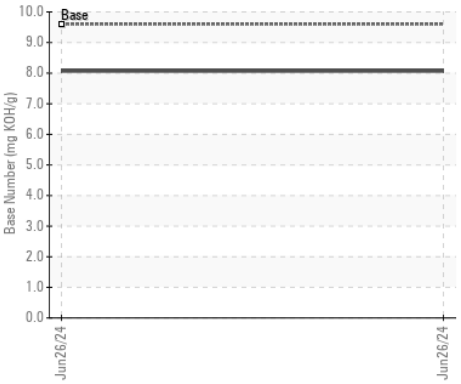
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112430
Lab Number : 02645713
Unique Number : 5803252
Test Package : MOB 2 (Additional Tests: FuelDilution, GLYCOL, KV40, PercentFuel, TAN Auto, TAN Man, VI, Visc@)

Received : 05 Jul 2024
Tested : 08 Jul 2024
Diagnosed : 08 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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