MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
728002
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

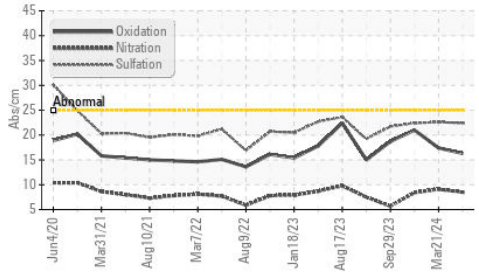
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

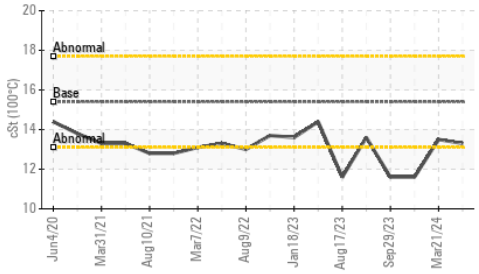
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113224	GFL0102870	GFL0097302
Sample Date		Client Info		17 May 2024	21 Mar 2024	08 Dec 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	14592	14020
Filter Age	hrs	Client Info		0	0	14020
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>120	7	8	6
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	4	3
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>25	1	1	4
Potassium	ppm	ASTM D5185(m)	>20	6	5	0
Fuel		WC Method	>3.0	<1.0	<1.0	0.7
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.4	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.5	9.1	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.4	22.6	22.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		4	4	3
Boron	ppm	ASTM D5185(m)	0	113	98	38
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	1	5	42
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	20	69	510
Calcium	ppm	ASTM D5185(m)	1070	2127	2042	1687
Phosphorus	ppm	ASTM D5185(m)	1150	926	859	701
Zinc	ppm	ASTM D5185(m)	1270	1129	1090	868
Sulfur	ppm	ASTM D5185(m)	2060	2791	2555	1951
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.3	17.4	21.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	13.5	▲ 11.6

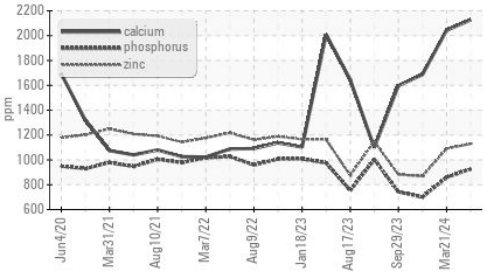
FT-IR (Direct Trend)



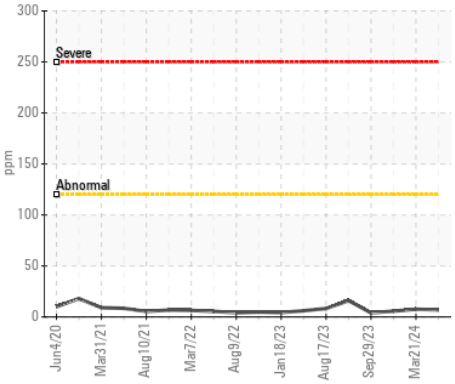
Viscosity @ 100°C



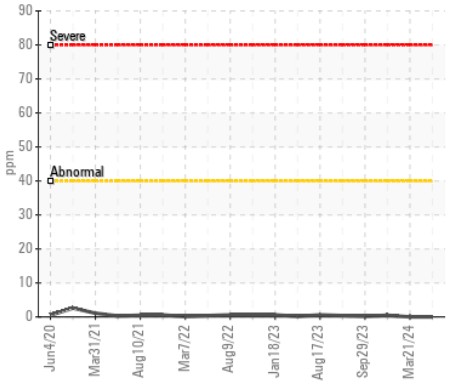
Additives



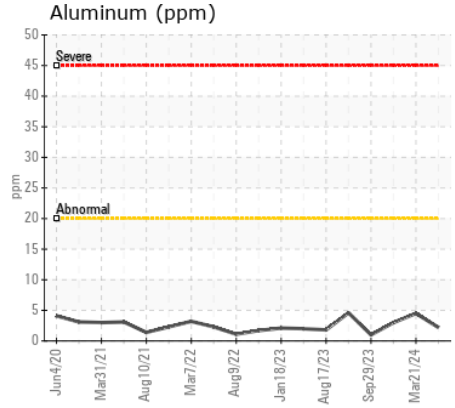
Iron (ppm)



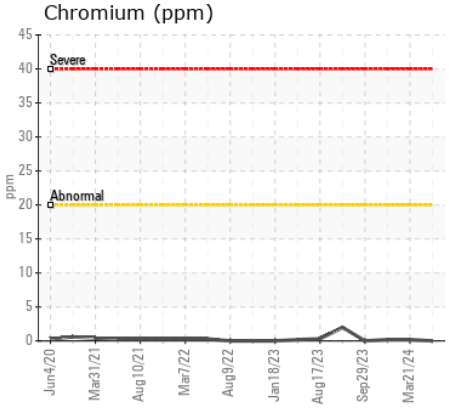
Lead (ppm)



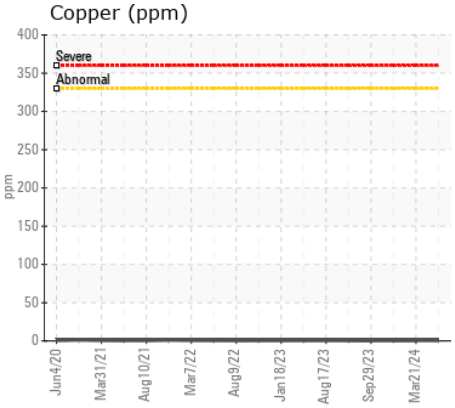
Aluminum (ppm)



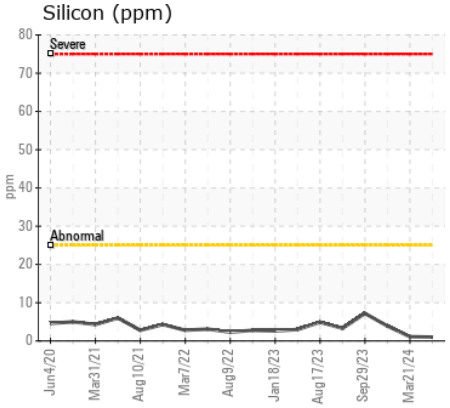
Chromium (ppm)



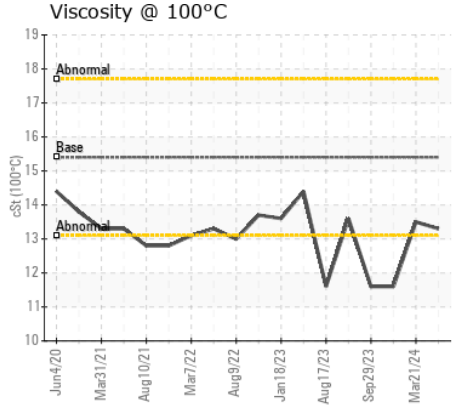
Copper (ppm)



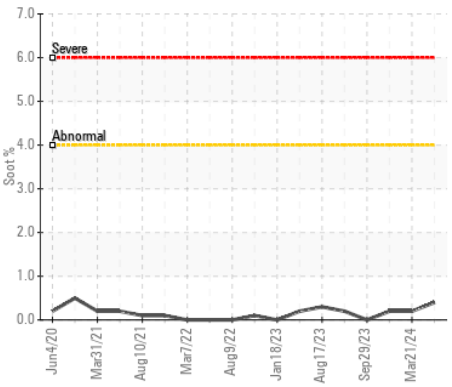
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113224
Lab Number : 02636590
Unique Number : 5785752
Test Package : MOB 1

Received : 21 May 2024
Tested : 21 May 2024
Diagnosed : 21 May 2024 - Wes Davis

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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