MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
901094
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

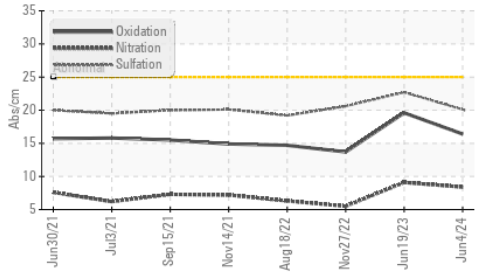
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

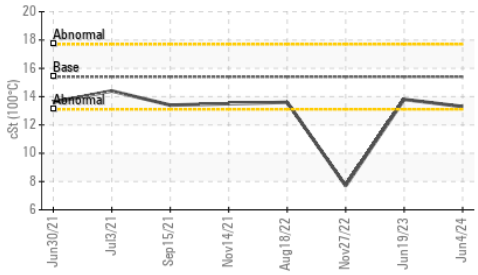
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096829	GFL0084047	GFL0057523
Sample Date		Client Info		04 Jun 2024	19 Jun 2023	27 Nov 2022
Machine Age	hrs	Client Info		11274	7316	290391
Oil Age	hrs	Client Info		600	0	0
Filter Age	hrs	Client Info		600	600	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>110	8	11	12
Chromium	ppm	ASTM D5185(m)	>4	0	<1	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>25	4	6	3
Lead	ppm	ASTM D5185(m)	>45	0	0	0
Copper	ppm	ASTM D5185(m)	>85	2	2	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE
Silicon	ppm	ASTM D5185(m)	>30	4	4	2
Potassium	ppm	ASTM D5185(m)	>20	6	3	1
Fuel		WC Method	>5	<1.0	<1.0	0.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.4	0.1
Nitration	Abs/cm	ASTM D7624*	>20	8.4	9.1	5.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.1	22.7	20.6
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		4	2	1
Boron	ppm	ASTM D5185(m)	0	2	3	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	61	62	16
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	983	1013	258
Calcium	ppm	ASTM D5185(m)	1070	1110	1092	337
Phosphorus	ppm	ASTM D5185(m)	1150	993	1048	539
Zinc	ppm	ASTM D5185(m)	1270	1220	1220	603
Sulfur	ppm	ASTM D5185(m)	2060	2494	2147	937
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	19.6	13.7
Visc @ 40°C	cSt	ASTM D7279(m)	113.9	97.2	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	13.8	▲ 7.7
Viscosity Index (VI)	Scale	ASTM D2270*	142	135	---	---

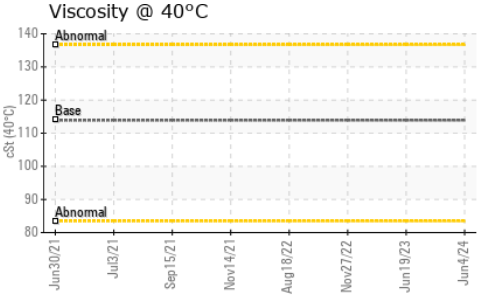
FT-IR (Direct Trend)



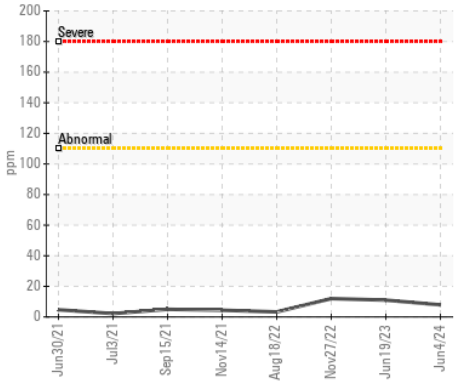
Viscosity @ 100°C



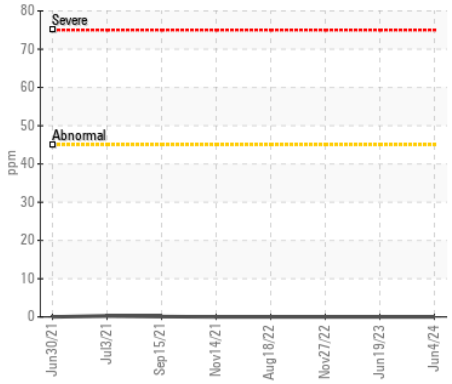
Viscosity @ 40°C



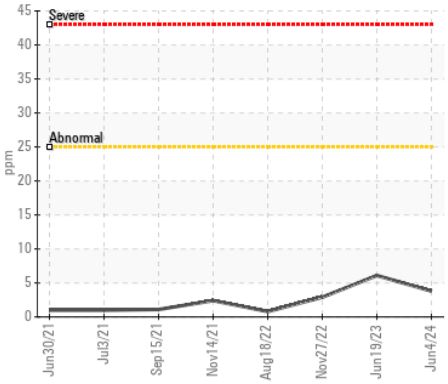
Iron (ppm)



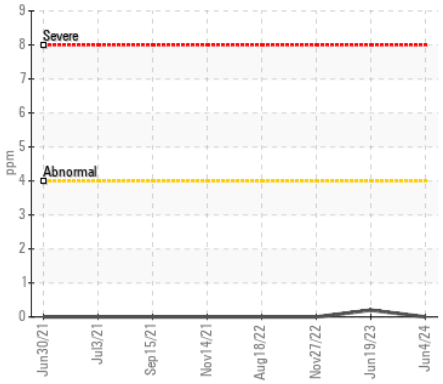
Lead (ppm)



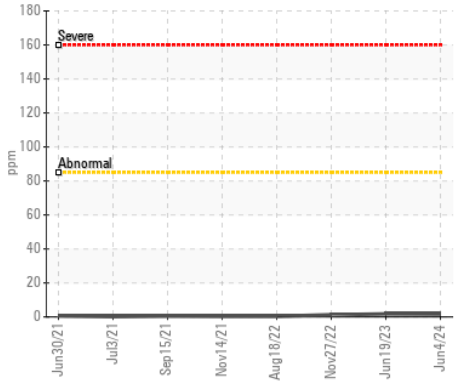
Aluminum (ppm)



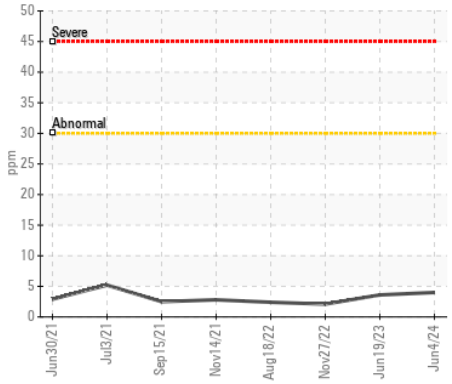
Chromium (ppm)



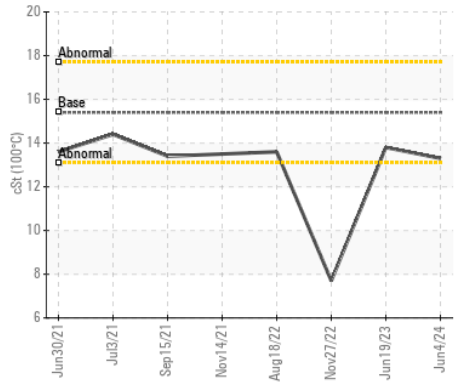
Copper (ppm)



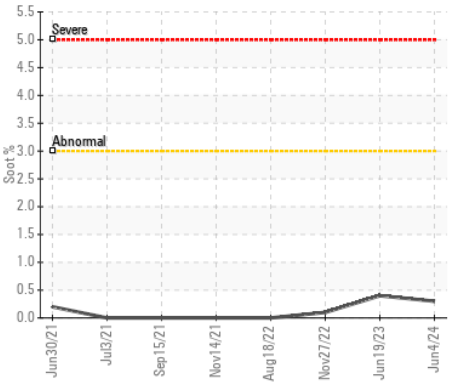
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0096829
Lab Number : 02642258
Unique Number : 5799797
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 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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