MOB LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
701039
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

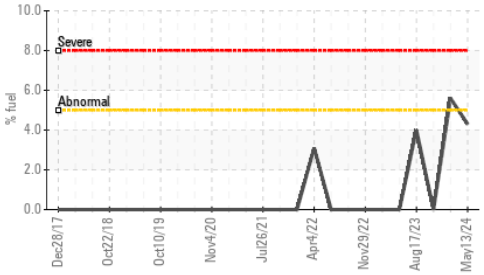
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

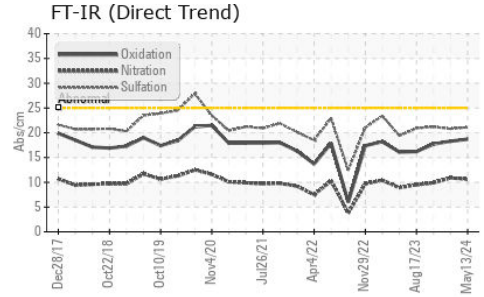
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116846	GFL0110736	GFL0097458
Sample Date		Client Info		13 May 2024	09 Feb 2024	13 Nov 2023
Machine Age	hrs	Client Info		416	416	416
Oil Age	hrs	Client Info		416	416	416
Filter Age	hrs	Client Info		416	416	416
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>100	13	13	12
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	6	1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
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	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	9	11	<1
Fuel	%	ASTM D7593*	>5	▲ 4.3	▲ 5.6	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	10.6	10.9	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.1	20.8	21.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		2	1	2
Boron	ppm	ASTM D5185(m)	0	1	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	54	54	57
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	854	861	928
Calcium	ppm	ASTM D5185(m)	1070	933	962	1020
Phosphorus	ppm	ASTM D5185(m)	1150	889	896	953
Zinc	ppm	ASTM D5185(m)	1270	1063	1073	1174
Sulfur	ppm	ASTM D5185(m)	2060	2252	2371	2350
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.7	18.3	17.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	12.9	▲ 12.3	13.3

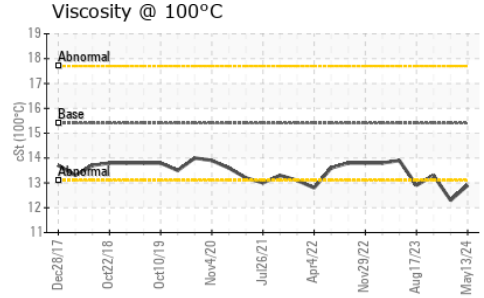
Fuel Dilution



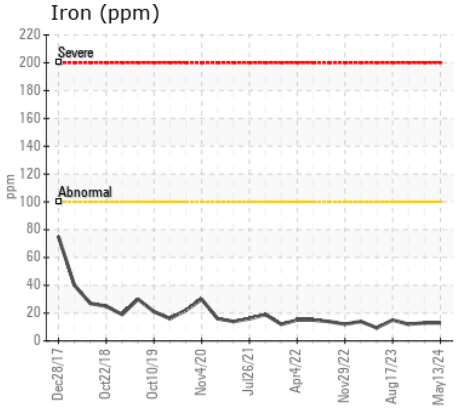
FT-IR (Direct Trend)



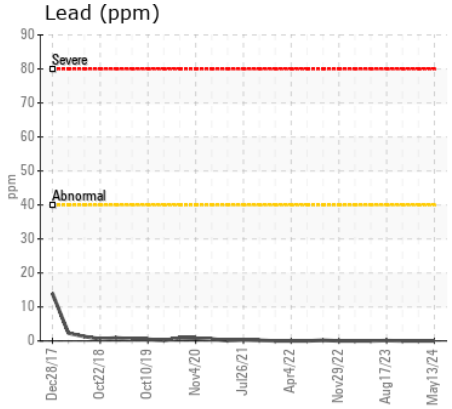
Viscosity @ 100°C



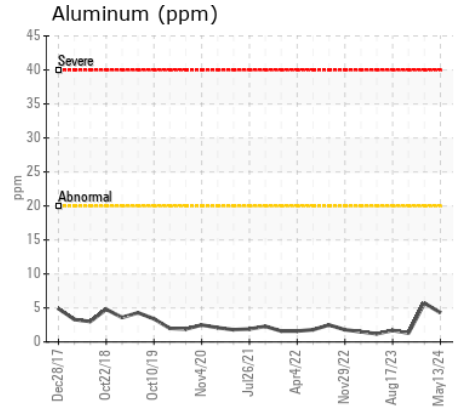
Iron (ppm)



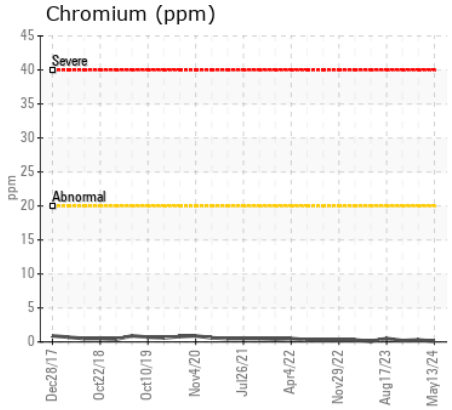
Lead (ppm)



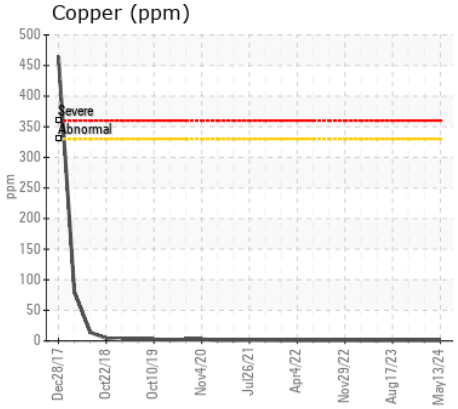
Aluminum (ppm)



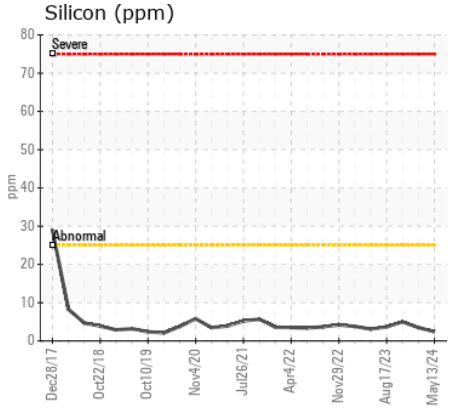
Chromium (ppm)



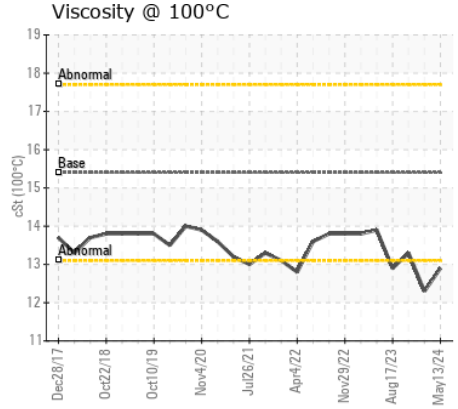
Copper (ppm)



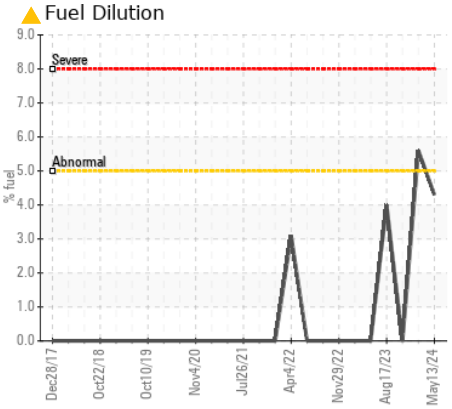
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0116846
Lab Number : 02635507
Unique Number : 5776660
Test Package : MOB 1 (Additional Tests: PercentFuel)

Received : 15 May 2024
Tested : 16 May 2024
Diagnosed : 16 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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