MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
101039
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 10W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

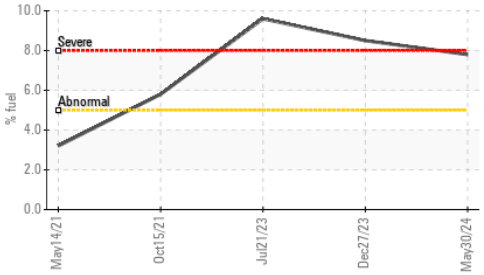
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

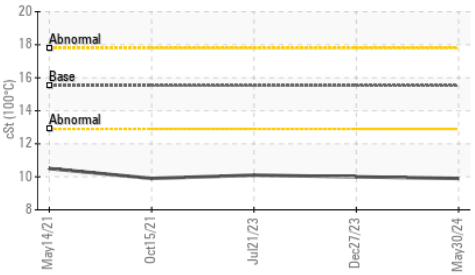
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100576	GFL0100640	GFL0077034
Sample Date		Client Info		30 May 2024	27 Dec 2023	21 Jul 2023
Machine Age	kms	Client Info		189850	177748	169572
Oil Age	kms	Client Info		0	8000	0
Filter Age	kms	Client Info		0	8000	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185(m)	>100	34	48	81
Chromium	ppm	ASTM D5185(m)	>20	1	2	3
Nickel	ppm	ASTM D5185(m)	>2	<1	1	1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	5	6	8
Lead	ppm	ASTM D5185(m)	>40	<1	4	4
Copper	ppm	ASTM D5185(m)	>330	3	4	6
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>25	5	6	9
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel	%	ASTM D7593*	>5	▲ 7.8	▲ 8.5	▲ 9.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0.6	0.8
Nitration	Abs/cm	ASTM D7624*	>20	12.8	14.7	18.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.5	26.6	31.3
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	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		5	2	2
Boron	ppm	ASTM D5185(m)	2	<1	1	<1
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	55	54	53
Manganese	ppm	ASTM D5185(m)	0	<1	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	886	836	823
Calcium	ppm	ASTM D5185(m)	1070	946	885	862
Phosphorus	ppm	ASTM D5185(m)	1150	893	884	931
Zinc	ppm	ASTM D5185(m)	1270	1064	1028	1018
Sulfur	ppm	ASTM D5185(m)	2060	2133	2243	2051
Oxidation	Abs/.1mm	ASTM D7414*	>25	28.3	33.2	41.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.52	▲ 9.9	10.0	10.1

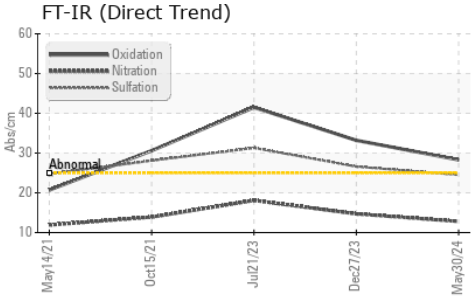
Fuel Dilution



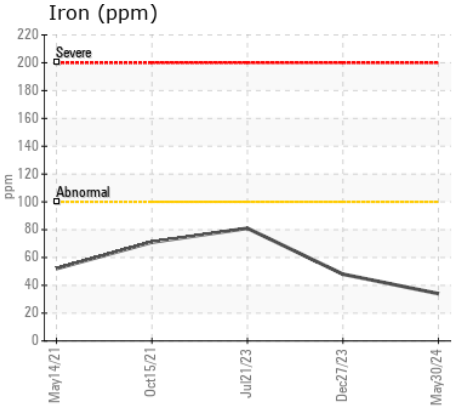
Viscosity @ 100°C



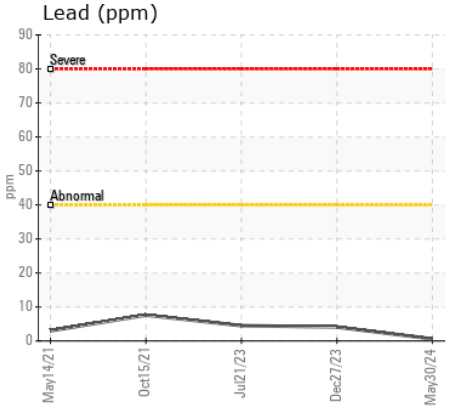
FT-IR (Direct Trend)



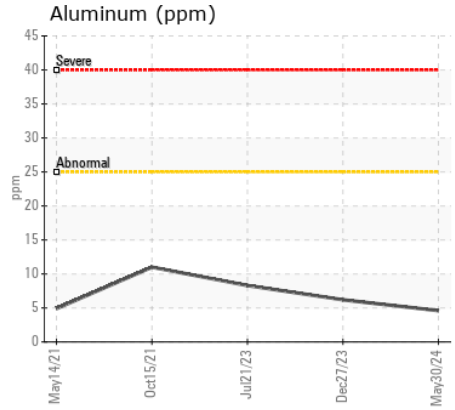
Iron (ppm)



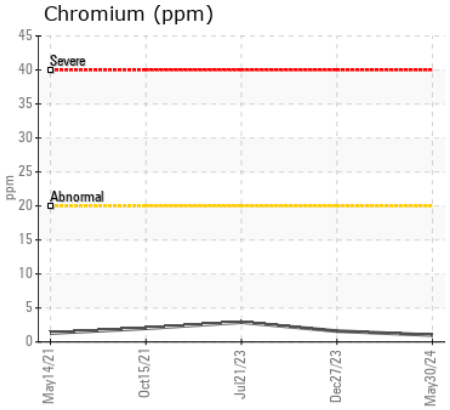
Lead (ppm)



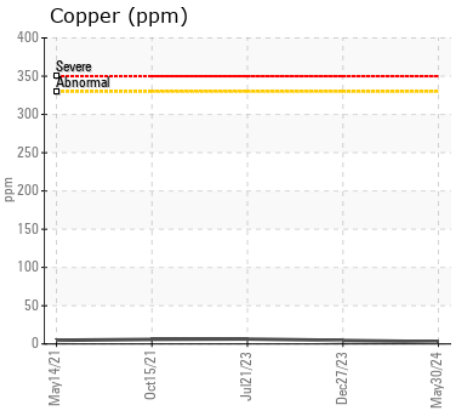
Aluminum (ppm)



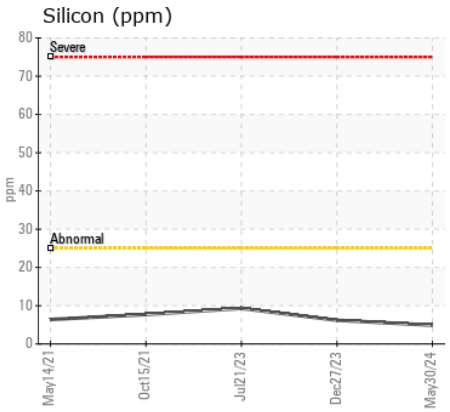
Chromium (ppm)



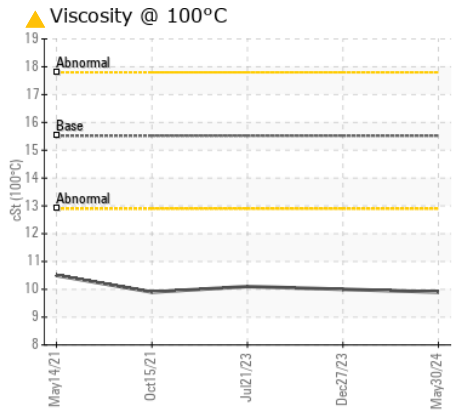
Copper (ppm)



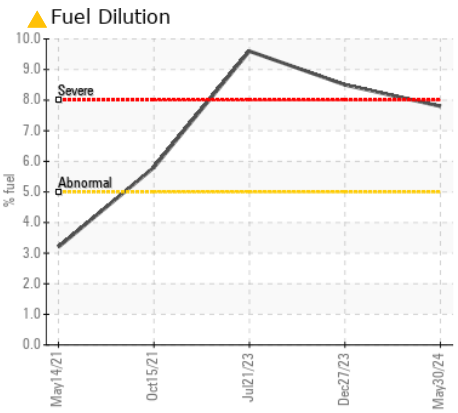
Silicon (ppm)



Viscosity @ 100°C



Fuel Dilution



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100576
Lab Number : 02639553
Unique Number : 5788715
Test Package : MOB 1 (Additional Tests: PercentFuel, Visual)

Received : 04 Jun 2024
Tested : 05 Jun 2024
Diagnosed : 06 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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