MOB I LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
351071
Component
Diesel Engine
Fluid
PETRO CANADA 10W30 (--- GAL)

RECOMMENDATION

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

WEAR

Iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated.

CONTAMINATION

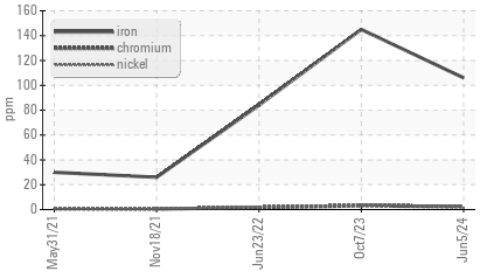
There is no indication of any contamination in the oil.

FLUID CONDITION

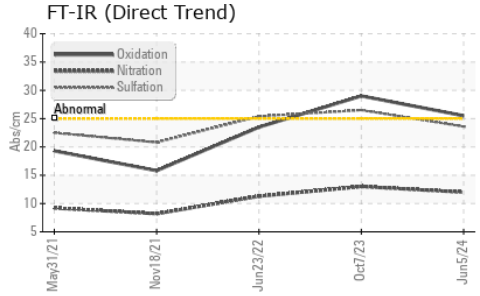
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100578	GFL0077014	GFL0054685
Sample Date		Client Info		05 Jun 2024	07 Oct 2023	23 Jun 2022
Machine Age	kms	Client Info		366563	353072	316004
Oil Age	kms	Client Info		63060	0	0
Filter Age	kms	Client Info		63060	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
PQ		ASTM D8184*		90	0	---
Iron	ppm	ASTM D5185(m)	>100	▲ 106	▲ 145	84
Chromium	ppm	ASTM D5185(m)	>20	2	3	2
Nickel	ppm	ASTM D5185(m)	>2	3	▲ 4	2
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	7	9	4
Lead	ppm	ASTM D5185(m)	>40	6	7	6
Copper	ppm	ASTM D5185(m)	>330	4	6	3
Tin	ppm	ASTM D5185(m)	>15	<1	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	7	11	7
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	1
Fuel		WC Method	>5	<1.0	1.6	▲ 6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.2	0
Nitration	Abs/cm	ASTM D7624*	>20	12.0	13.0	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.6	26.5	25.4
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)		2	4	2
Boron	ppm	ASTM D5185(m)		3	3	10
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		72	77	63
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		1027	1058	860
Calcium	ppm	ASTM D5185(m)		1115	1162	1294
Phosphorus	ppm	ASTM D5185(m)		1036	1091	1016
Zinc	ppm	ASTM D5185(m)		1260	1327	1211
Sulfur	ppm	ASTM D5185(m)		2466	2513	2786
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.5	29.0	23.5
Visc @ 100°C	cSt	ASTM D7279(m)		10.2	11.1	▲ 10.3

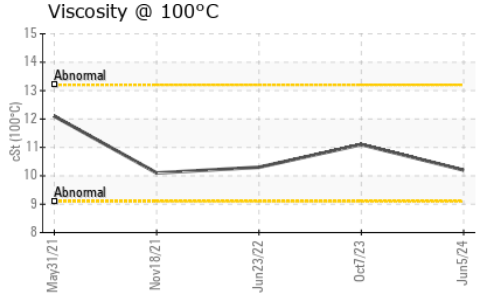
Ferrous Alloys



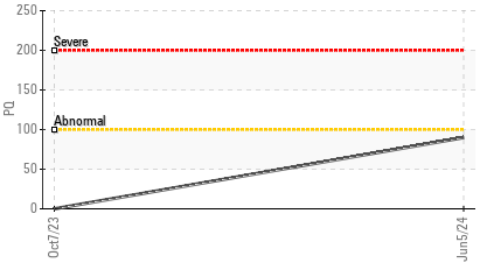
FT-IR (Direct Trend)



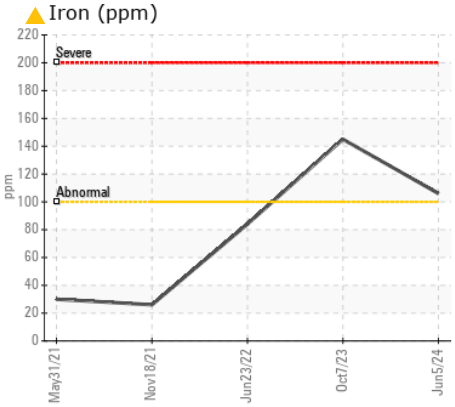
Viscosity @ 100°C



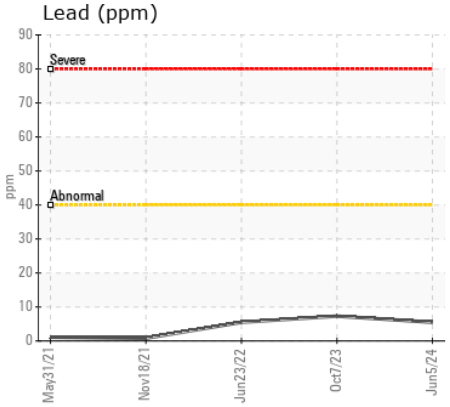
PQ



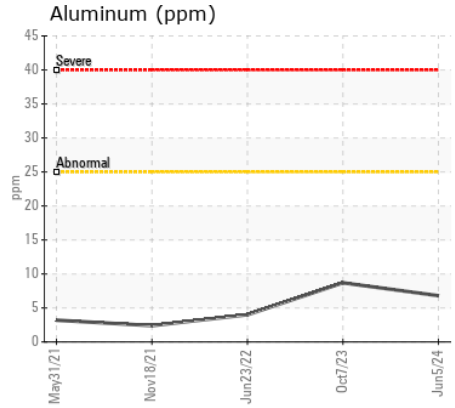
Iron (ppm)



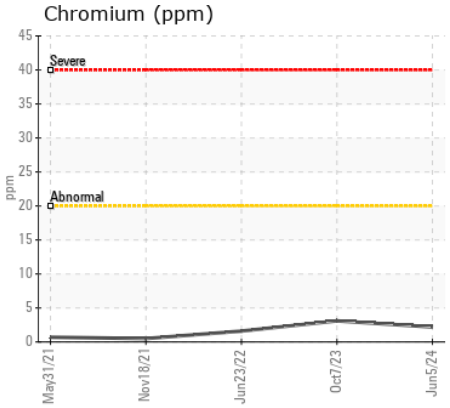
Lead (ppm)



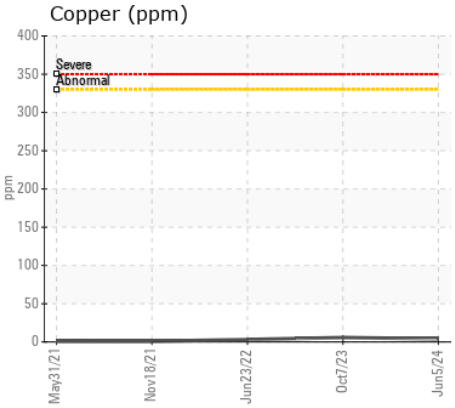
Aluminum (ppm)



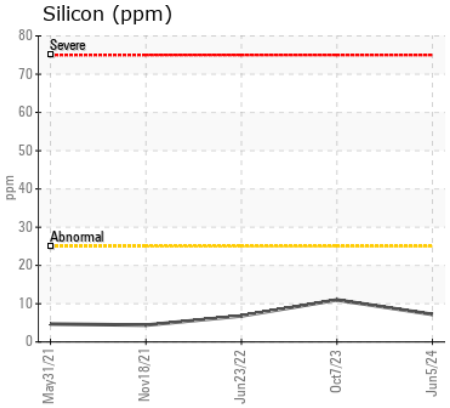
Chromium (ppm)



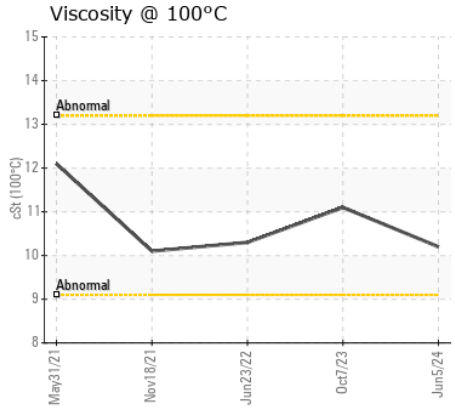
Copper (ppm)



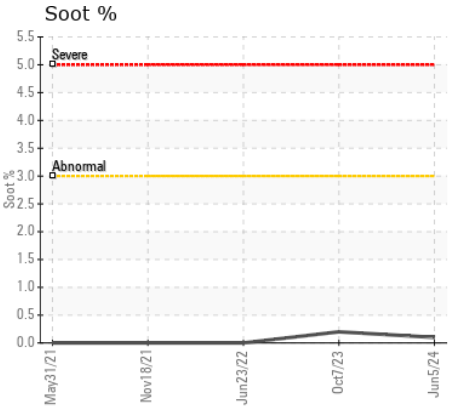
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100578
Lab Number : 02640403
Unique Number : 5789565
Test Package : MOB 1 (Additional Tests: PQ, Visual)

Received : 07 Jun 2024
Tested : 07 Jun 2024
Diagnosed : 07 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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