MOB I LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION

Area
GFL216
Machine Id
925004
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

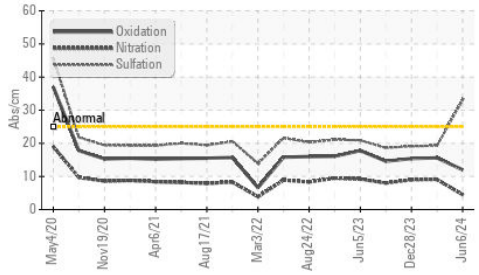
There is an abnormal level of sulfation indicated. Light fuel dilution occurring. There is a light concentration of water present in the oil. Test for glycol is negative. No other contaminants were detected in the oil.

FLUID CONDITION

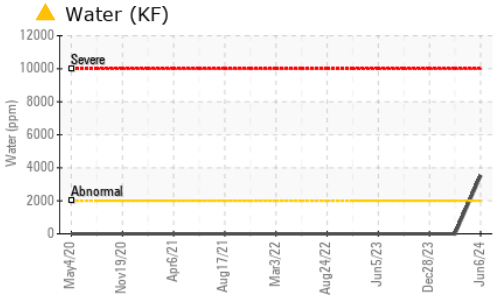
Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0121956	GFL0113898	GFL0099679
Sample Date		Client Info		06 Jun 2024	10 Mar 2024	28 Dec 2023
Machine Age	kms	Client Info		458636	22318	444260
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>120	2	7	7
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
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	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	9	9
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	3	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	---	NONE
Silicon	ppm	ASTM D5185(m)	>25	3	4	3
Potassium	ppm	ASTM D5185(m)	>20	8	<1	<1
Fuel	%	ASTM D7593*	>3.0	2.8	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	▲ 0.352	---	---
ppm Water	ppm	ASTM D6304*	>2000	▲ 3521	---	---
Glycol	%	ASTM D7922*		0.0	NEG	NEG
Soot %	%	ASTM D7844*	>4	0	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	4.5	9.1	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	▲ 33.1	19.3	19.1
Silt	scalar	Visual*	NONE	NONE	---	NONE
Debris	scalar	Visual*	NONE	NONE	---	NONE
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	NONE
Appearance	scalar	Visual*	NORML	NORML	---	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	▲ .2%	NEG	NEG
Sodium	ppm	ASTM D5185(m)	>216	16	4	3
Boron	ppm	ASTM D5185(m)	250	● 1090	3	4
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	54	58	58
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	450	863	946	918
Calcium	ppm	ASTM D5185(m)	3000	929	1020	1014
Phosphorus	ppm	ASTM D5185(m)	1150	888	1003	957
Zinc	ppm	ASTM D5185(m)	1350	1057	1141	1145
Sulfur	ppm	ASTM D5185(m)	4250	2358	2608	2608
Oxidation	Abs/.1mm	ASTM D7414*	>25	12.0	15.6	15.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.0	13.5	13.1

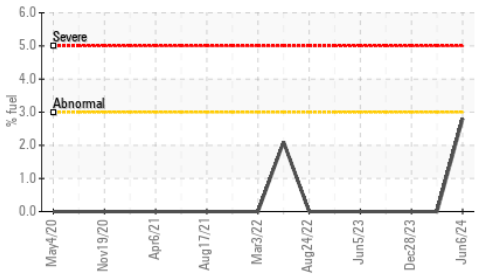
FT-IR (Direct Trend)



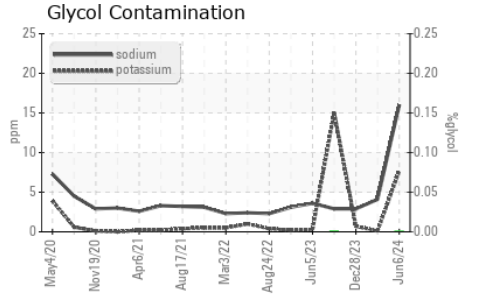
Water (KF)



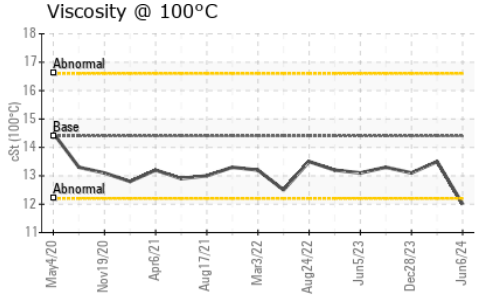
Fuel Dilution



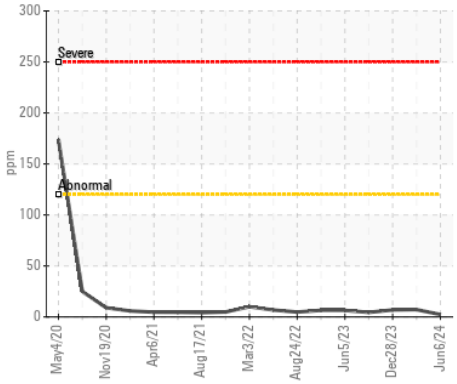
Glycol Contamination



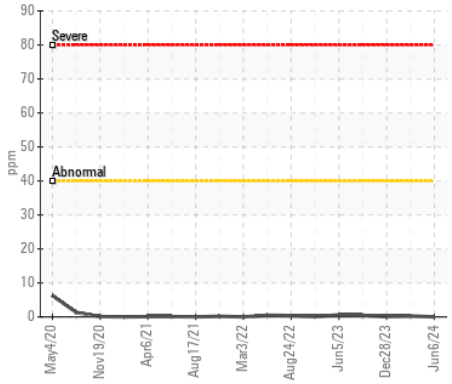
Viscosity @ 100°C



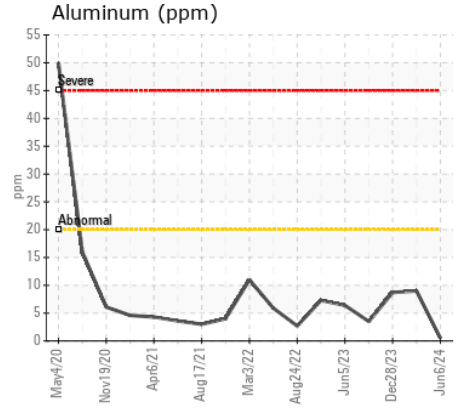
Iron (ppm)



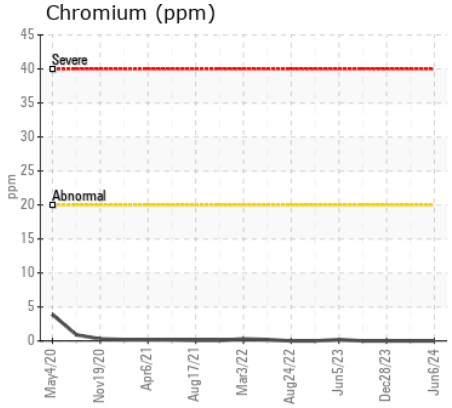
Lead (ppm)



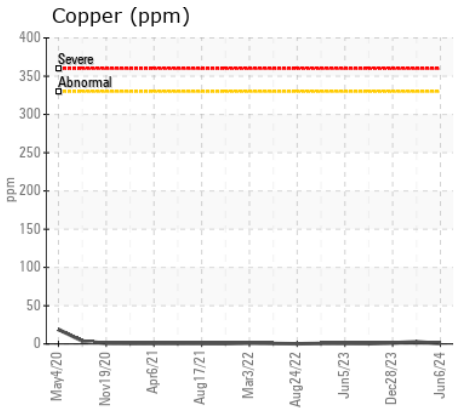
Aluminum (ppm)



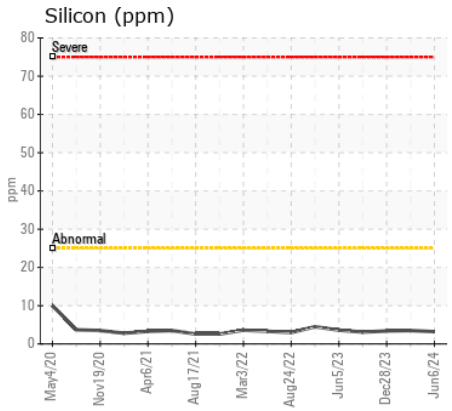
Chromium (ppm)



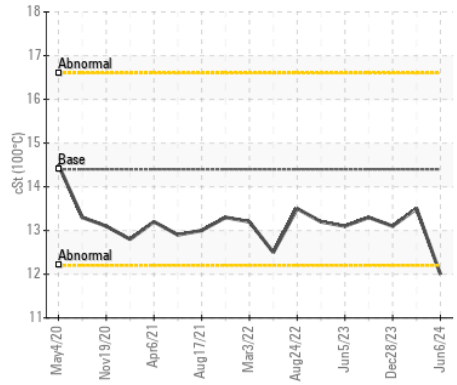
Copper (ppm)



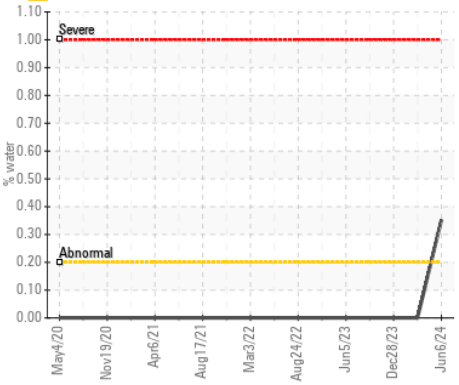
Silicon (ppm)



Viscosity @ 100°C



Water



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0121956
Lab Number : 02641601
Unique Number : 5799140
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KF, PercentFuel, Visual)

Received : 13 Jun 2024
Tested : 14 Jun 2024
Diagnosed : 14 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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