MOB II

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
710033
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (40 LTR)

RECOMMENDATION

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

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

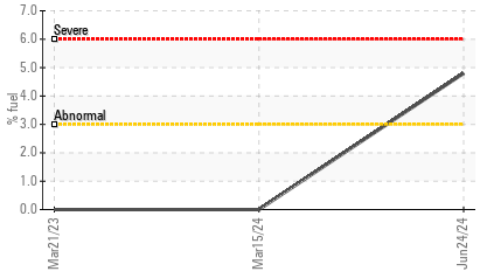
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

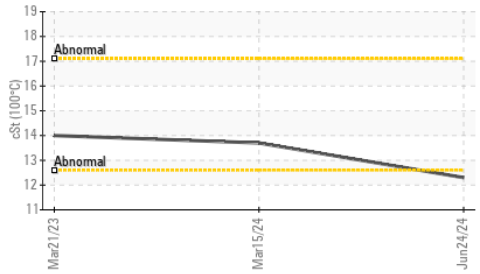
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC956137**	PC956152	WC356147
Sample Date		Client Info		**24 Jun 2024**	15 Mar 2024	21 Mar 2023
Machine Age	kms	Client Info		**77028**	74312	67380
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	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>90	**17**	33	21
Chromium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**<1**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**3**	7	6
Lead	ppm	ASTM D5185(m)	>40	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>330	**2**	3	2
Tin	ppm	ASTM D5185(m)	>15	**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Silicon	ppm	ASTM D5185(m)	>25	**3**	4	6
Potassium	ppm	ASTM D5185(m)	>20	**2**	3	4
Fuel	%	ASTM D7593*	>3.0	▲ **4.8**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	ASTM D7844*	>6	**0.4**	0.7	0.3
Nitration	Abs/cm	ASTM D7624*	>20	**9.5**	11.0	9.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.6**	22.7	22.2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185(m)		**5**	3	7
Boron	ppm	ASTM D5185(m)		**9**	<1	7
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**55**	59	58
Manganese	ppm	ASTM D5185(m)		**<1**	0	<1
Magnesium	ppm	ASTM D5185(m)		**853**	960	929
Calcium	ppm	ASTM D5185(m)		**956**	1074	1279
Phosphorus	ppm	ASTM D5185(m)		**867**	926	1090
Zinc	ppm	ASTM D5185(m)		**1063**	1165	1222
Sulfur	ppm	ASTM D5185(m)		**2265**	2279	2796
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.0**	20.2	16.1
Base Number (BN)	mg KOH/g	ASTM D2896*		**7.96**	7.75	8.02
Visc @ 100°C	cSt	ASTM D7279(m)		▲ **12.3**	13.7	14.0

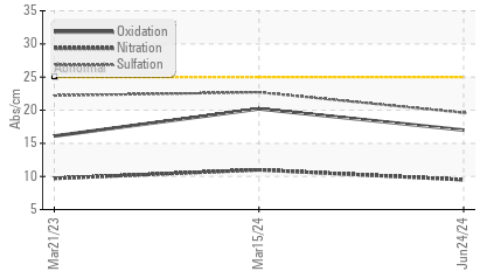
Fuel Dilution



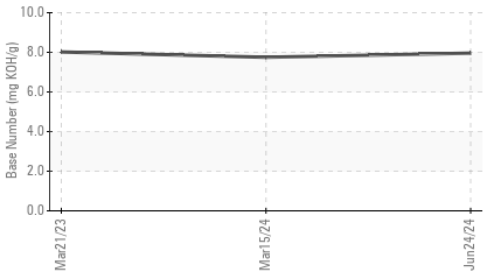
Viscosity @ 100°C



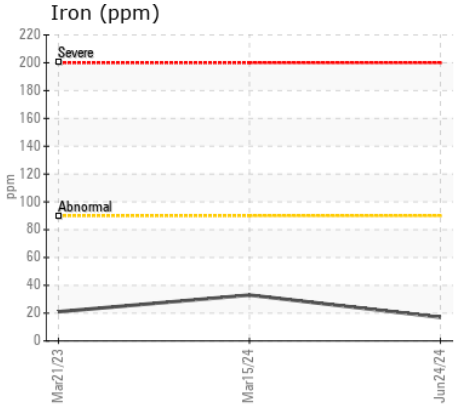
FT-IR (Direct Trend)



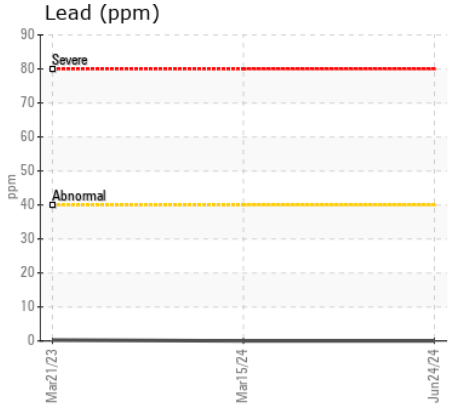
Base Number



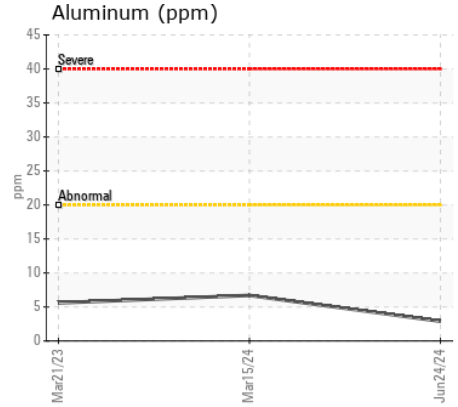
Iron (ppm)



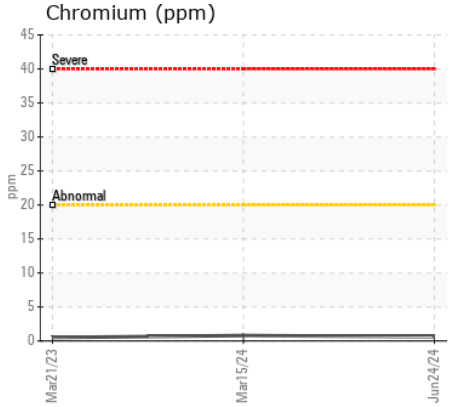
Lead (ppm)



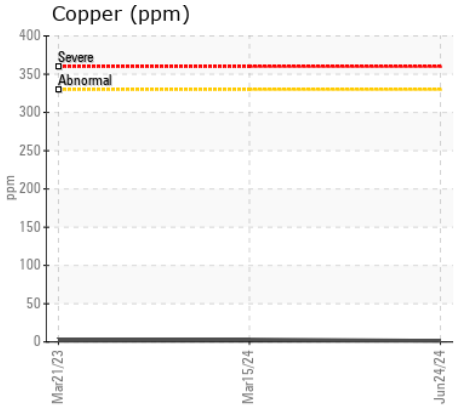
Aluminum (ppm)



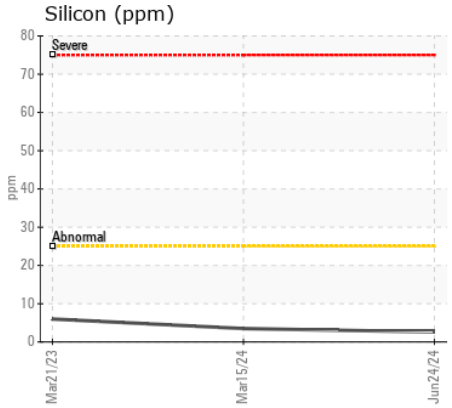
Chromium (ppm)



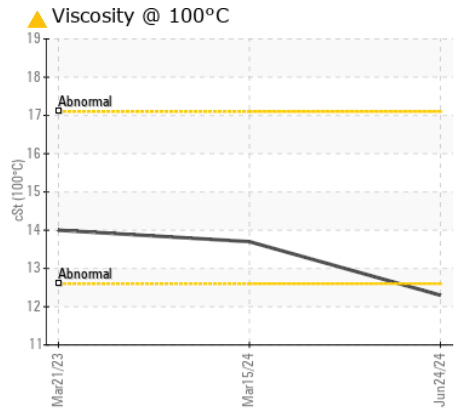
Copper (ppm)



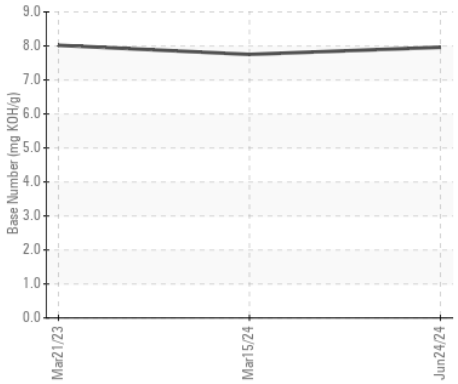
Silicon (ppm)



Viscosity @ 100°C



Base Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC956137
Lab Number : 02644287
Unique Number : 5801826
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 27 Jun 2024
Tested : 28 Jun 2024
Diagnosed : 28 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.

GFL Environmental - 870 - St John s
19 Harding Road,
St. John`s, NL
CA A1A 5T8
Contact: Angus Molloy
amolloy@gflenv.com
T: (709)739-9302
F: