

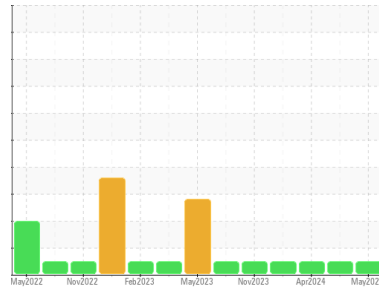


OIL ANALYSIS REPORT



Area
(62A1N7N) MONTGOMERY
 Machine Id
MACK 428088
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0080677	GFL0089936	GFL0080693
Sample Date	Client Info		20 May 2024	11 Apr 2024	03 Apr 2024
Machine Age	mls Client Info		261468	255113	11570
Oil Age	mls Client Info		250804	244449	906
Oil Changed	Client Info		Not Changed	N/A	Not Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>120	5	2	9
Chromium	ppm ASTM D5185m	>20	0	0	0
Nickel	ppm ASTM D5185m	>5	0	0	0
Titanium	ppm ASTM D5185m	>2	0	0	0
Silver	ppm ASTM D5185m	>2	0	0	0
Aluminum	ppm ASTM D5185m	>20	2	<1	2
Lead	ppm ASTM D5185m	>40	1	<1	0
Copper	ppm ASTM D5185m	>330	<1	<1	2
Tin	ppm ASTM D5185m	>15	<1	<1	0
Vanadium	ppm ASTM D5185m		0	<1	0
Cadmium	ppm ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	7	7	5
Barium	ppm ASTM D5185m	0	0	0	0
Molybdenum	ppm ASTM D5185m	60	61	58	62
Manganese	ppm ASTM D5185m	0	<1	0	0
Magnesium	ppm ASTM D5185m	1010	989	922	1021
Calcium	ppm ASTM D5185m	1070	1063	1058	1164
Phosphorus	ppm ASTM D5185m	1150	1107	1004	1109
Zinc	ppm ASTM D5185m	1270	1269	1212	1328
Sulfur	ppm ASTM D5185m	2060	3660	3607	4081

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	4	2	5
Sodium	ppm ASTM D5185m		1	3	2
Potassium	ppm ASTM D5185m	>20	2	13	4

INFRA-RED

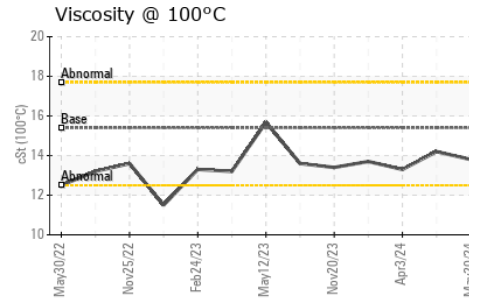
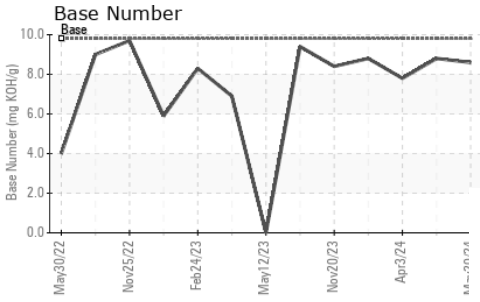
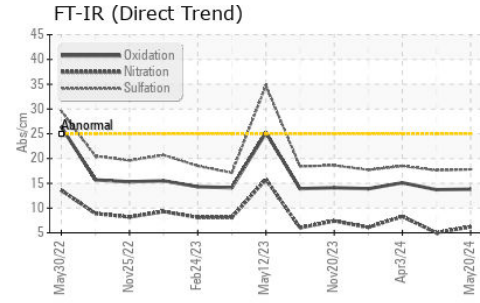
	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>4	0.3	0.1	0.4
Nitration	Abs/cm *ASTM D7624	>20	6.2	5.0	8.3
Sulfation	Abs/.1mm *ASTM D7415	>30	17.8	17.6	18.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	13.8	13.7	15.1
Base Number (BN)	mg KOH/g ASTM D2896	9.8	8.6	8.8	7.8



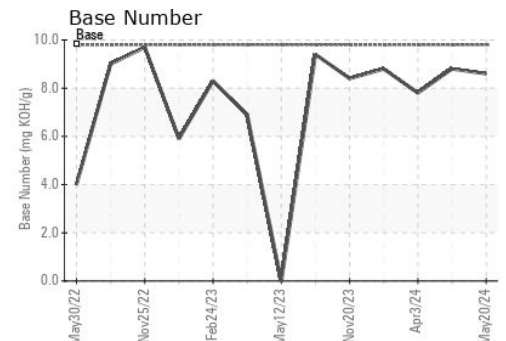
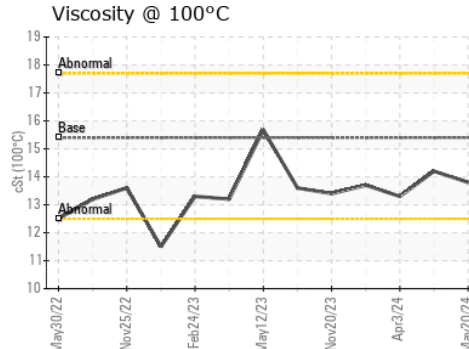
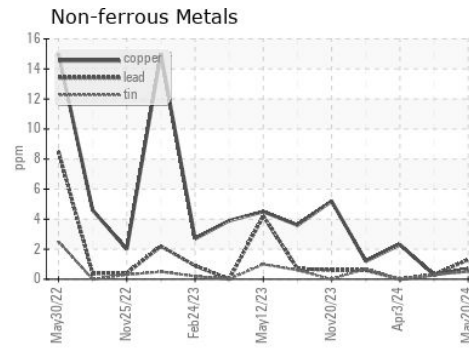
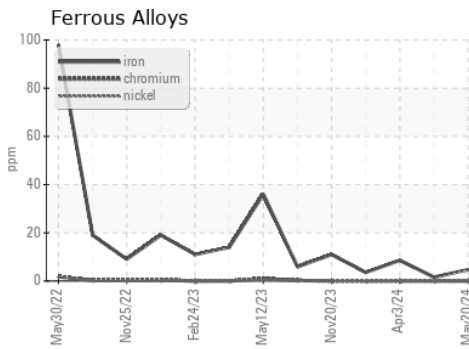
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0080677
 Lab Number : 06187192
 Unique Number : 11043944
 Test Package : FLEET

GFL Environmental - 955 - Montgomery
 1121 Wilbanks St
 Montgomery, AL
 US 36108
 Contact: LISA REEVES

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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